# Appendix K
## Transportation Assessment

# K-1 2020 Transportation Assessment

LINSCOTT LAW & GREENSPAN
engineers

**TRANSPORTATION ASSESSMENT**

# HILTON UNIVERSAL CITY PROJECT

**City of Los Angeles, California**
**December 2020**

*Prepared for:*

**Hillcrest Real Estate, LLC.**
555 Universal Hollywood Drive
Universal City, CA 91068

LLG Ref. 5-19-0485-1




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**APPENDIX**


A. Approved Transportation Assessment Memorandum of Understanding

B. LADOT VMT Calculator Output

C. Manual Traffic Count Data

D. Detailed Plans, Programs, Ordinances, and Policies Review

E. LADOT VMT Calculator Output (No TDM)

F. HCM and Levels of Service Explanation
HCM Data Worksheets – AM and PM Peak Hours

**TRANSPORTATION ASSESSMENT**

# HILTON UNIVERSAL CITY PROJECT

**City of Los Angeles, California**
**December 2020**

## 1.0 INTRODUCTION

### 1.1 Transportation Assessment Overview

This transportation assessment has been conducted to identify and evaluate the potential transportation impacts of the proposed Hilton Universal City Project (the "Project") located at 555 Universal Hollywood Drive (the "Project Site") on the surrounding street system. The Project Site is located in the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan Area of the City of Los Angeles, California. The Project Site is generally bounded by undeveloped parcels and Universal Hollywood Drive to the north, landscaped hillside, a surface parking lot, and W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west. The Project Site location and general vicinity are shown in ***Figure 1–1***.

The transportation analysis follows City of Los Angeles (the "City") transportation assessment guidelines[1] (TAG). The City's TAG are focused on transportation metrics that promote: the reduction of greenhouse gas emissions, the development of multimodal networks and access to diverse land uses, as well as safety, sustainability and smart growth. In compliance with the California Environmental Quality Act (CEQA), the City's TAG identify vehicle miles traveled (VMT) as the primary metric for evaluating a project's transportation impacts along with whether the proposed project conflicts or is inconsistent with local plans and policies. In addition, the City's TAG require evaluation of non-CEQA mobility elements such as pedestrian, bicycle and transit access, project access and circulation, project construction, and the potential for residential street intrusion.

This transportation assessment presents (i) a CEQA assessment of whether the Project conflicts or is inconsistent with local transportation-related plans and policies, (ii) a CEQA assessment of Project-related VMT, (iii) a CEQA assessment of whether the Project increases hazards due to a geometric design feature or incompatible use, (iv) a non-CEQA assessment of pedestrian, bicycle and transit access, (v) a non-CEQA evaluation of Project access, safety and circulation, and (vi) a non-CEQA review of Project construction activities.

### 1.2 Study Area

The CEQA and non-CEQA analysis criteria for this transportation assessment were identified in consultation with City of Los Angeles Department of Transportation (LADOT) staff. The analysis criteria were determined based on the City's TAG, the proposed Project description and

[1] *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* LADOT, July 2020.




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MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ STUDY INTERSECTION

# FIGURE 1-1
# VICINITY MAP

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location, and the characteristics of the surrounding transportation system. As defined by the City as Lead Agency under CEQA, LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment Memorandum of Understanding (MOU) for the Project on October 14, 2020. The approved MOU is contained in ***Appendix A***.

# 2.0 PROJECT DESCRIPTION

## 2.1 Project Site Location

The Project Site is located at 555 Universal Hollywood Drive in the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan Area of the City. The Project Site is generally bounded by undeveloped parcels and Universal Hollywood Drive to the north, landscaped hillside, a surface parking lot, and W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west. The Project Site location and general vicinity are shown in *Figure 1–1*.

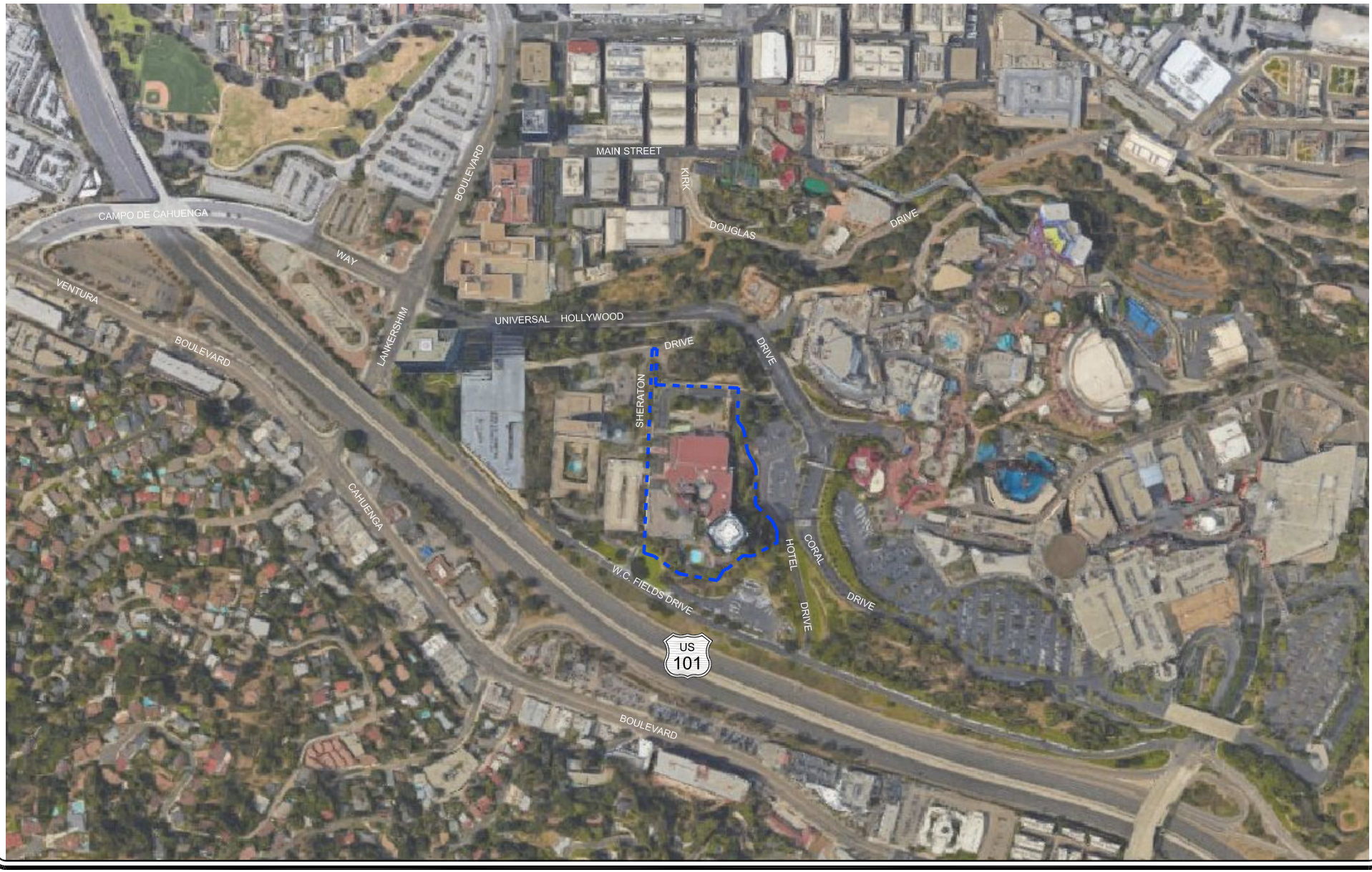
The Project Site is located within a Transit Priority Area and is currently served by many local lines and regional/commuter lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. The transit lines include: Metro Local Lines 150/240, 155, 224, and 237, Metro Rapid Line 750, the Metro B Line (Red), and the BurbankBus Pink Route.

## 2.2 Existing Project Site

The Project Site comprises approximately 7.26 acres and is currently developed with the existing Hilton Los Angeles/Universal City Hotel (the "Existing Hotel Building") and associated improvements, including ancillary hotel uses (the "Ancillary Hotel Building"). The Existing Hotel Building is a 24-story building with 495 hotel guestrooms, 26,030 square feet of meeting/banquet space, 5,050 square feet of restaurant/lounge area, 8,819 square feet of outdoor pool area, 924 square feet of retail/sundry floor area, and 9,665 square feet of lobby/circulation area. There are currently 652 parking spaces serving the Existing Hotel Building. Access to the Project Site is provided via one driveway along the west side of Universal Hollywood Drive, at the northeasterly portion of the Project Site. The Project Site is highlighted in an aerial photograph presented in ***Figure 2–1***.

## 2.3 Project Description

As proposed, the Project would expand the Existing Hotel Building with the addition of a 20-story expansion building (the "Hotel Expansion Building") on the southern portion of the Project Site. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 square feet of quality restaurant floor area, and 10,000 square feet of spa floor area limited to guests and 250 non-guest members. Additionally, the Project would expand the north portion of the Ancillary Hotel Building to include an additional 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space (the "Junior Ballroom/Meeting Room Addition"). An additional 408 parking spaces would be added to the Project Site as part of the Project, for a total of 1,060 parking spaces on-site. Construction and occupancy of the Project is proposed to be completed by the year 2025. The site plan for the Project is illustrated in ***Figure 2–2***.




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MAP SOURCE: GOOGLE MAPS
PROJECT SITE

# FIGURE 2-1
# PROJECT SITE AERIAL

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SOURCE: LARGE ARCHITECTURE

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# FIGURE 2-2
# PROJECT SITE PLAN

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## 2.4 Vehicular Project Site Access

Vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the Project Site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition (the "North Plaza), the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building (the "South Plaza"). The existing Universal Hollywood driveway will continue to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

## 2.5 Pedestrian and Bicycle Project Site Access

Pedestrian access to the Project Site will continue to be provided via Universal Hollywood Drive. The north side of the existing driveway is improved with sidewalks, and the outbound driveway approach at Universal Hollywood Drive is improved with a striped crosswalk and American with Disabilities Act (ADA) access ramps with yellow truncated domes. Additionally, as shown in *Figure 2–2*, a pedestrian path along the south side from the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement.

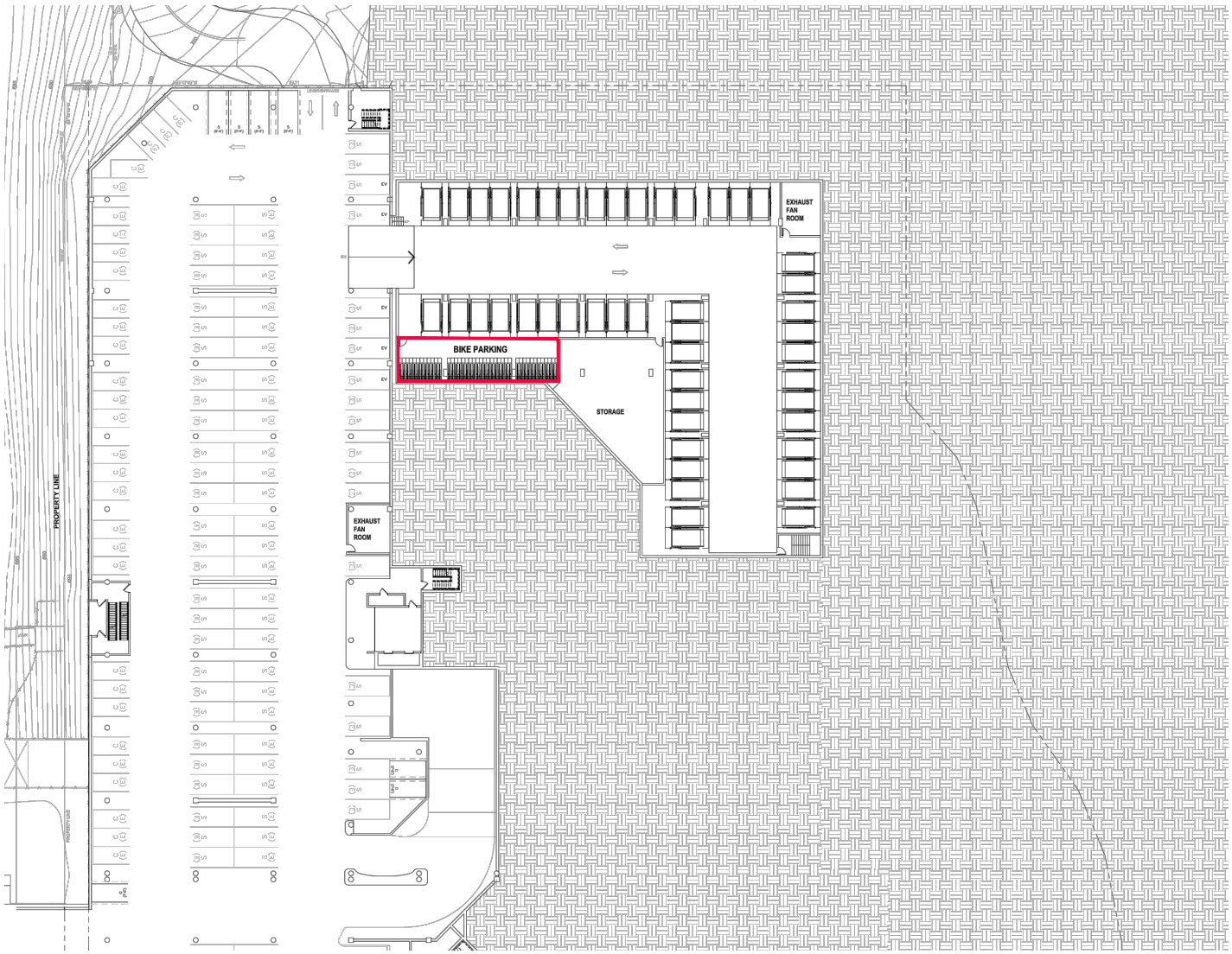
Bicycle access to the Project Site will continue to be provided via Universal Hollywood Drive. The Project will provide bicycle parking on-site for hotel guests, visitors, and employees of the Project. Bicycle parking spaces will be installed in compliance with the Los Angeles Municipal Code (LAMC). The location of the Project's on-site bicycle parking is shown in ***Figure 2–3***.

## 2.6 Project Parking

There are currently 652 parking spaces provided in the Existing Hotel Building's on-site subterranean parking garage. To meet the LAMC vehicle parking requirements, the Project will expand the existing parking garage with three levels of parking below the new Junior Ballroom/Meeting Room Addition, provide overflow surface parking for employees and service vehicles along the existing service road that runs generally along the eastern perimeter of the Project Site, and add new parking spaces along the Project Site's internal roadway. The Project will provide a total of 408 new parking spaces. Upon completion of the Project, a total of 1,060 parking spaces will be provided.

## 2.7 Project Service Area

All loading activities will continue to occur off-street and internal to the Project Site. Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Ancillary Hotel Building, similar to existing conditions. The loading dock will continue to be accessed by the service road along the east side of the Project Site.




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SOURCE: LARGE ARCHITECTURE
ON-SITE BICYCLE PARKING

# FIGURE 2-3
# PROJECT SITE PLAN
## ON-SITE BICYCLE PARKING (LEVEL B2 - NORTH)

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## 2.8 Hotel Valet/Passenger Drop-Off/Pick-Up

The existing banquet entrance at the west façade of the Ancillary Hotel Building will become a rideshare (e.g., Uber/Lyft, airport shuttles, etc.) pick-up/drop-off location as shown on *Figure 2–2*. Hotel guests and visitors choosing to utilize the Hotel's valet service will be directed to drop-off their vehicles at the valet area on Level 1. The location of the Hotel's valet drop-off/pick-up area is shown in ***Figure 2–4***. Guests to the Hotel's existing conference center or Junior Ballroom will utilize a new valet station at Level 2 of the existing parking garage.

## 2.9 Project Traffic Generation and Distribution

### 2.9.1 *Project Traffic Generation*

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Traffic volumes expected to be generated by the Project during the weekday AM and PM peak hours were estimated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*.[2] The following trip generation rates were used to forecast the traffic volumes expected to be generated by the Project:

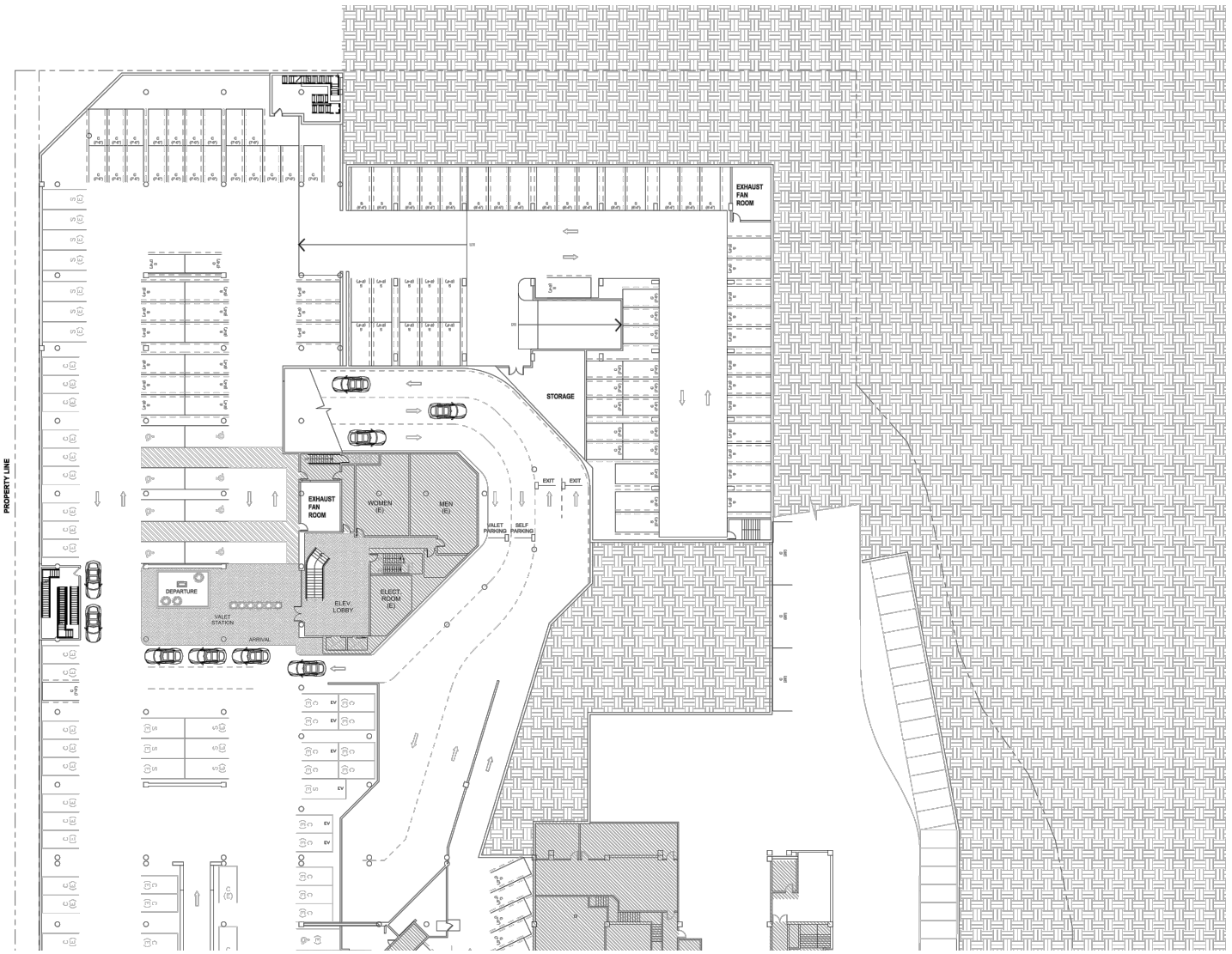
- Hotel: ITE Land Use Code 310 (Hotel) trip generation average rates were used to forecast the traffic volumes expected to be generated by the hotel component of the Project (including the Project's ancillary meeting space and ancillary ballroom space).

- Restaurant: ITE Land Use Code 931 (Quality Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the restaurant component of the Project.

- Spa: ITE Land Use Code 492 (Spa) trip generation average rates were used to forecast the traffic volumes expected to be generated by the spa component of the Project.

In addition to the trip generation forecasts for the Project (which are essentially an estimate of the number of vehicles that are expected to enter and exit the Project Site access points), a forecast was also made of the transit and walk-in trips that will be generated by the Project in lieu of trips by the private automobile. The Project Site is within a Transit Priority Area and is currently served by many local lines and regional/commuter lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. The transit lines include: Metro Local Lines 150/240, 155, 224, and 237, Metro Rapid Line 750, the Metro B Line (Red), and the BurbankBus Pink Route. Further discussion of the transit framework is provided in Section 3.2 herein. The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding land uses, specifically Universal Studios Hollywood and Universal CityWalk, located immediately east of the Project Site. Consistent with the TAG, and approved by LADOT in the transportation assessment MOU attached to this report in *Appendix A*, transit and walk-in adjustment of 25 percent (25%) has been utilized due to the Project's proximity to nearby transit lines and pedestrian attractors.

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




SOURCE: LARGE ARCHITECTURE

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# FIGURE 2-4
# PROJECT SITE PLAN
## DROP-OFF/PICK-UP AREA (LEVEL 1 - NORTH)

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Lastly, an internal capture adjustment has been applied for the Project to account for synergistic effects of the planned land use mix. Internal capture trips are those trips made internal to the site between land uses in a mixed or multi-use development, land uses tend to interact, and thus attract a portion of each other's trip generation. An internal capture adjustment of 15% has been utilized to account for the interactions between the hotel, restaurant, and spa uses.

The trip generation forecast for the Project was submitted for review and approval by LADOT staff. As presented in ***Table 2–1***, the Project is expected to generate 148 net new vehicle trips (89 inbound trips and 59 outbound trips) during the AM peak hour. During the PM peak hour, the Project is expected to generate 246 net new vehicle trips (139 inbound trips and 107 outbound trips).

The daily vehicle trips expected to be generated by the Project were estimated using Version 1.3 of the City's VMT Calculator. Copies of the detailed VMT Calculator worksheets for the Project are contained in ***Appendix B***. As indicated in the summary VMT Calculator worksheet, the Project is forecasted to generate 3,711 daily vehicle trips. It is noted that the Project will incorporate transportation demand management (TDM) strategies as Project Design Features. Further discussion of the TDM strategies is provided in Section 2.9

### 2.9.2 *Project Traffic Distribution and Assignment*

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

- The Project Site's proximity to major traffic corridors (Lankershim Boulevard, Ventura Boulevard, Cahuenga Boulevard, US-101 Freeway);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress availability at the Project Site assuming the site access and circulation scheme described in Section 2.4;
- The location of proposed parking areas;
- Nearby population and employment; and
- Input from LADOT staff.

The general, directional traffic distribution patterns for Project-related trips bound to the Project Site is presented in ***Figures 2–5***. The forecasted net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the proposed Project are presented in ***Figures 2–6*** and ***2–7***, respectively. The traffic volume assignments presented in

## Table 2-1
## PROJECT TRIP GENERATION [1]

29-Sep-20

| LAND USE | SIZE | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| ***Proposed Project*** | | | | | | | |
| Hotel [3] | 395 Rooms | 110 | 76 | 186 | 121 | 116 | 237 |
| Restaurant [4] | 12,000 GSF | 7 | 2 | 9 | 63 | 31 | 94 |
| Spa [5] | 10,000 GSF | 7 | 6 | 13 | 20 | 15 | 35 |
| **Subtotal** | | 124 | 84 | 208 | 204 | 162 | 366 |
| ***Transit/Walk-In Trips [6]*** | | | | | | | |
| Hotel (25%) | | (28) | (19) | (47) | (30) | (29) | (59) |
| Restaurant (25%) | | (2) | (1) | (3) | (16) | (8) | (24) |
| Spa (25%) | | (2) | (2) | (4) | (5) | (4) | (9) |
| **Subtotal** | | (32) | (22) | (54) | (51) | (41) | (92) |
| ***Internal Capture*** | | | | | | | |
| Restaurant [7] (15%) | | (1) | 0 | (1) | (7) | (3) | (10) |
| Spa [7] (15%) | | (1) | (1) | (2) | (2) | (2) | (4) |
| Hotel [8] | | (1) | (2) | (5) | (5) | (9) | (11) |
| **Subtotal** | | (3) | (3) | (6) | (14) | (14) | (14) |
| **NET INCREASE** | | **89** | **59** | **148** | **139** | **107** | **246** |

[1] Source: ITE *Trip Generation Manual,* 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 310 (Hotel) trip generation average rates.
- AM Peak Hour Trip Rate: 0.47 trips/room; 59% inbound/41% outbound
- PM Peak Hour Trip Rate: 0.60 trips/room; 51% inbound/49% outbound

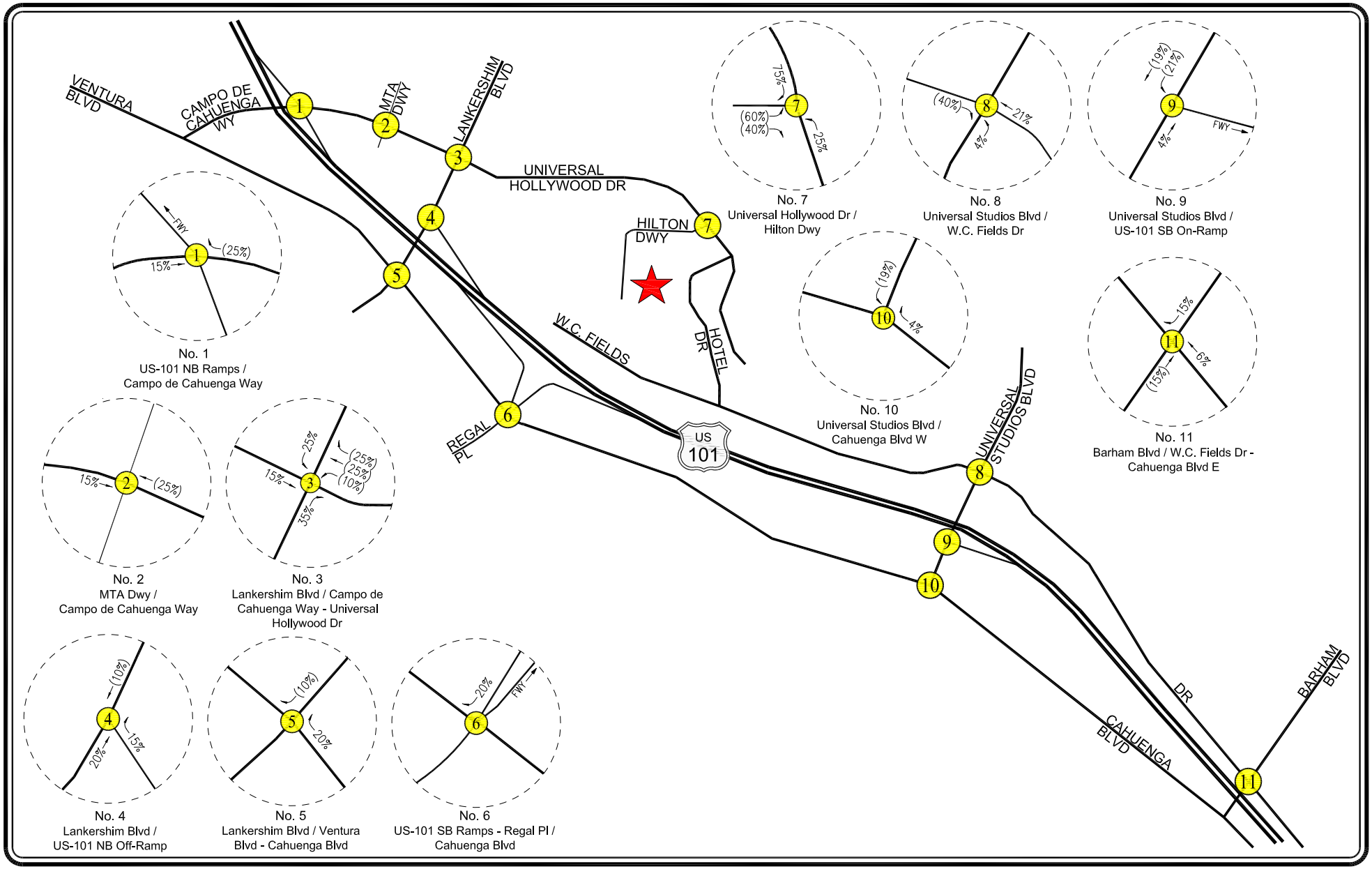
[4] ITE Land Use Code 931 (Quality Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 0.73 trips/1,000 SF of floor area; assume 80% inbound/20% outbound
- PM Peak Hour Trip Rate: 7.80 trips/1,000 SF of floor area; 67% inbound/33% outbound

[5] ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates.
- AM Peak Hour Trip Rate: 1.31 trips/1,000 SF of floor area; 51% inbound/49% outbound
- PM Peak Hour Trip Rate: 3.45 trips/1,000 SF of floor area; 57% inbound/43% outbound

[6] The transit reduction is based on the site's proximity to the Metro B Line (Red) rail station and has been applied to the all components of the Project based on the *LADOT Transportation Assessment Guidelines,* July 2020.
The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding uses (i.e., Universal Studios Hollywood, Universal City Walk).

[7] The internal capture reduction for the restaurant and spa uses is based on the synergy between the hotel and the restaurant and spa uses provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.

[8] For each internal capture trip related to the restaurant and spa uses, a corresponding internal capture trip reduction is assumed for the hotel use.




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

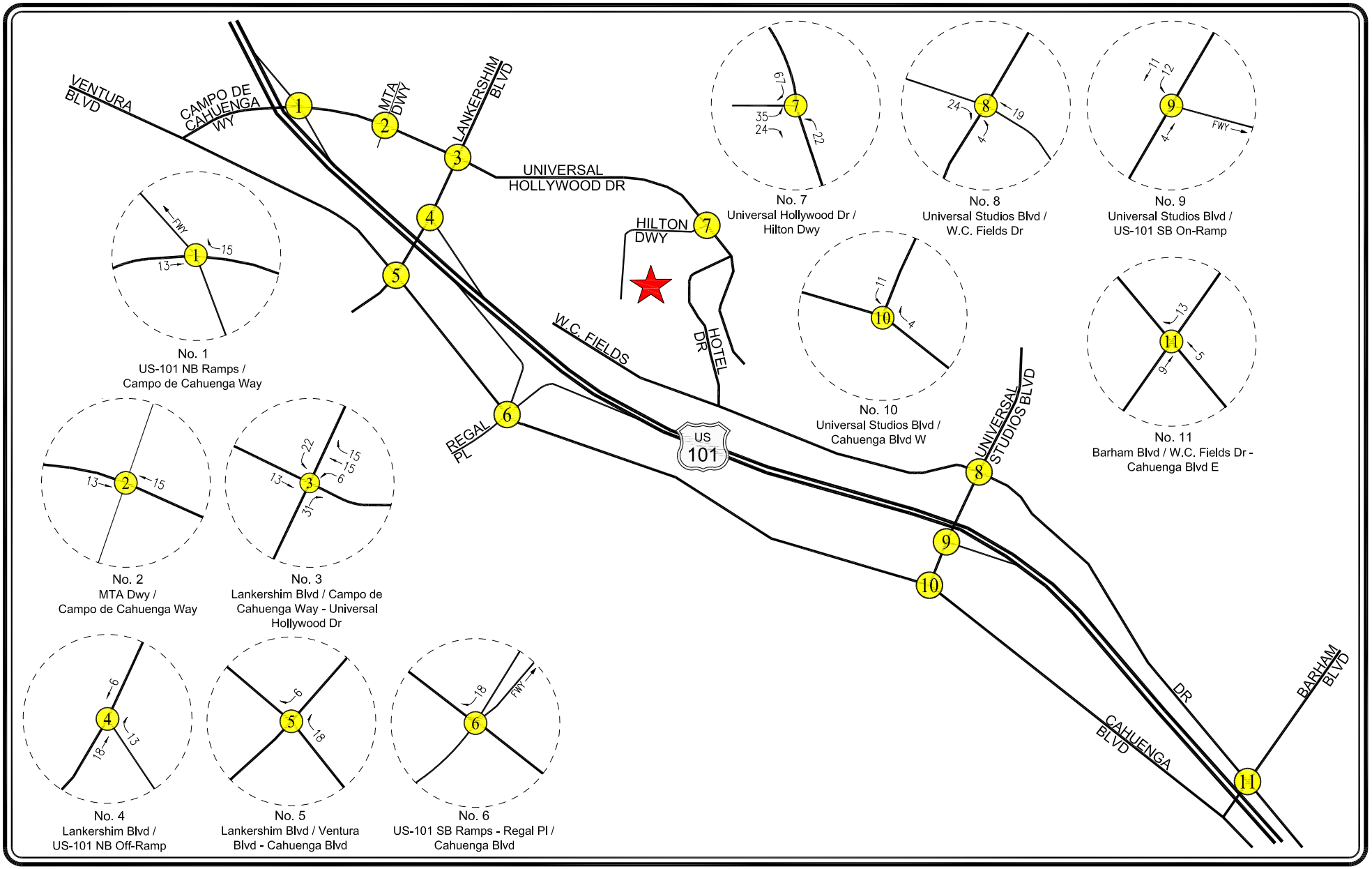
# FIGURE 2-5
# PROJECT TRIP DISTRIBUTION

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★ PROJECT SITE

Ⓧ STUDY INTERSECTION

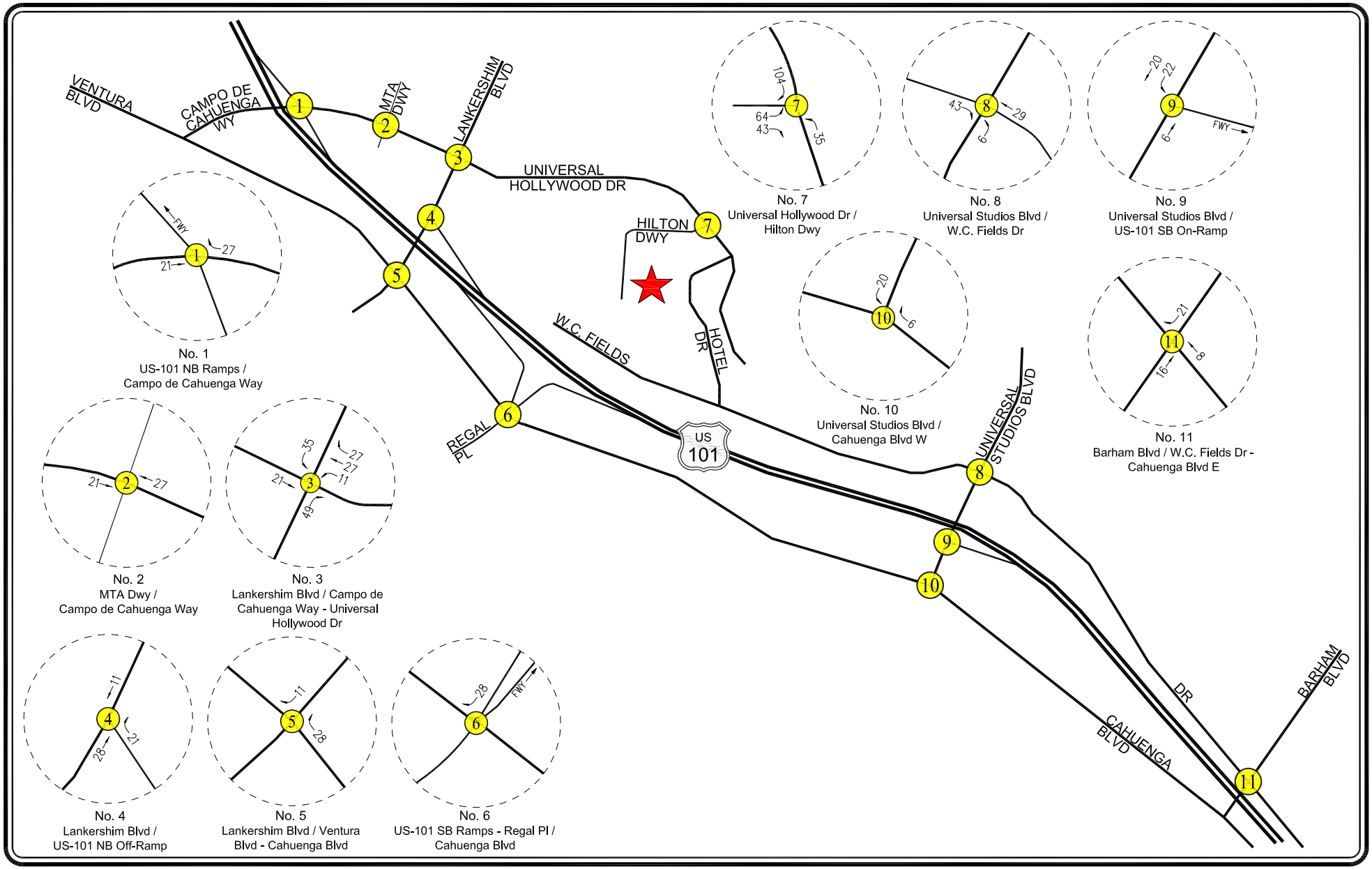
# FIGURE 2-6
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

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★ PROJECT SITE

Ⓧ STUDY INTERSECTION

# FIGURE 2-7
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

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*Figures 2–6* and *2–7* reflect the traffic distribution characteristics shown in *Figure 2–5*, and the Project traffic generation forecast presented in *Table 2–1*.

## 2.10 Project Transportation Demand Management Strategies

The Project includes four TDM strategies as a Project Design Feature. The TDM strategies are listed in Table 2.2-2 of the TAG. The Existing Hotel Building currently implements these TDM strategies and will continue to do so upon completion of the Project. Further discussion of the TDM strategy is provided in the sections below.

### 2.10.1 *Transit Subsidies*

This TDM strategy involves the subsidization of transit fare for employees of the Project. The subsidy will be proactively offered to each employee at least once annually for a minimum of five years. At the time of initial opening, the Project will offer a daily transit subsidy to all employees of $1.49 per day.

### 2.10.2 *Promotions and Marketing*

The Project will utilize promotional and marketing tools to educate and inform employees about alternative transportation options and the effects of their travel choices. Rather than two-way communication tools or tools that would encourage an individual to consider a different mode of travel at the time the trip is taken (i.e., smartphone application, daily email, etc.), this TDM strategy includes passive educational and promotional materials, such as posters, information boards, or a website with information that employees can choose to read at their own leisure.

### 2.10.3 *Include Bicycle Parking per Los Angeles Municipal Code*

Table 12.21.A.16(a)(2) in the LAMC provides the required short-term and long-term bicycle parking spaces for the Project. The Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces on-site.

The short-term bicycle parking ratios are as follows:

- Hotel (395 guestrooms): 1 space per 20 guestrooms. (20 spaces);
- Restaurant (6,500 s.f.): 1 space per 2,000 s.f. (3 spaces);
- Spa (6,800 s.f.): 1 space per 2,000 s.f. (3 spaces); and
- Junior Ballroom (5,000 s.f.): 1 space per 350 s.f. (14 spaces).

The long-term bicycle parking ratios are as follows:

- Hotel (395 guestrooms): 1 space per 20 guestrooms. (20 spaces);
- Restaurant (6,500 s.f.): 1 space per 2,000 s.f. (3 spaces);

- Spa (6,800 s.f.): 1 space per 2,000 s.f. (3 spaces); and
- Junior Ballroom (5,000 s.f.): 1 space per 700 s.f. (7 spaces).

Based on the above, the Project is required to provide 40 short-term and 33 long-term bicycle parking spaces, for a total of 73 bicycle parking spaces.

### 2.10.4 *Include Secure Bike Parking and Showers*

This strategy involves implementation of additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel by providing amenities at destinations. This strategy applies to projects that include bicycle parking on-site per the LAMC. Projects providing long-term bicycle parking secured from the general public in accordance with LAMC Section 12.21A.16(d)(2) and showers in accordance with LAMC Section 91.6307 qualify for this measure.

As noted above, the Project will provide short-term and long-term bicycle parking in accordance with LAMC Section 12.21A.16(d)(2). In addition, the Project will provide showers in accordance with LAMC Section 91.6307.

# 3.0 PROJECT CONTEXT

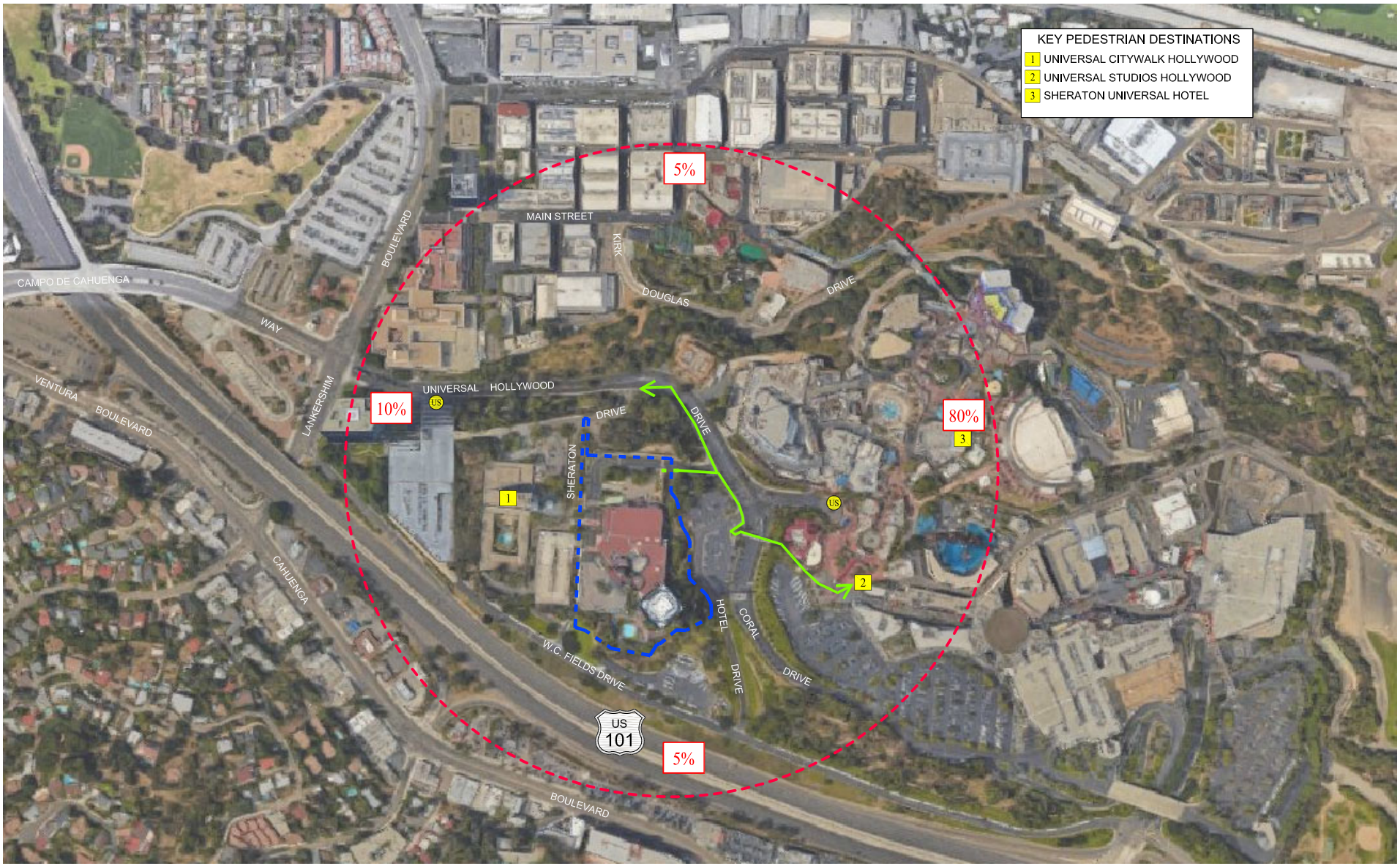
## 3.1 Non-Vehicle Transport System

### 3.1.1 *Pedestrian Framework*

Public sidewalks and pedestrian facilities are provided on Universal Hollywood Drive. Specifically, public sidewalks approximately five feet in width are provided along the Project Site's Universal Hollywood Drive frontage. Potential pedestrian destinations located within an approximately one-quarter mile radius (i.e., 1,320 feet) from the Project Site are noted in ***Figure 3–1***, per Section 3.2.4 of the TAG. ***Figure 3–2*** shows the existing pedestrian and transit facilities within an approximately one-quarter mile radius (i.e., 1,320 feet) from the Project Site. As presented in *Figure 3–2*, the following pedestrian facilities currently are provided in the direct vicinity of the Project Site:

- ADA access ramps, including some with the yellow truncated domes, which are designed to assist and warn pedestrians who are blind or visually impaired, are provided at the following intersections in the immediate vicinity of the Project Site:
  - Sheraton Drive / Universal Hollywood Drive
  - Universal Hollywood Drive / Hilton Driveway
  - Universal Hollywood Drive – Coral Drive / Hotel Drive
- Traditional parallel bar or continental style pedestrian crosswalks with varying widths of between approximately 10 feet and 12 feet are provided at the following intersections in the direct vicinity of the Project Site:
  - Sheraton Drive / Universal Hollywood Drive
  - Universal Hollywood Drive / Hilton Driveway
  - Universal Hollywood Drive – Coral Drive / Hotel Drive
- Pedestrian crossing signals and push buttons are presently included as part of the traffic signal controls at the nearby signalized intersections that are noted in *Figure 3–2*. Additionally, a skybridge across Coral Drive is located approximately 300 feet south of the Universal Hollywood Drive / Hilton Driveway intersection. This skybridge allows for safe pedestrian crossing across Coral Drive without potential conflict with vehicular traffic.

The Project has been designed to encourage pedestrian activity and walking as a transportation mode. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path would allow for safe walking conditions to and from Universal Studios Hollywood and Universal CityWalk via the Coral Drive skybridge. Furthermore, the




MAP SOURCE: GOOGLE MAPS
PROJECT SITE
QUARTER-MILE RADIUS
PEDESTRIAN ENTRANCE
PEDESTRIAN ROUTES TO KEY DESTINATIONS
XX% GEOGRAPHIC DISTRIBUTION

US UNIVERSAL STUDIOS SHUTTLE BUS STOP

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# FIGURE 3-1
# PEDESTRIAN ATTRACTORS INVENTORY

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
QUARTER-MILE RADIUS
SIGNAL
STOP SIGN
ADA CURB RAMP
ADA YELLOW TRUNCATED DOME
CROSSWALK
YELLOW CROSSWALK
SKYBRIDGE
UNIVERSAL STUDIOS SHUTTLE BUS STOP

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# FIGURE 3-2
# FACILITIES INVENTORY

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Hilton Driveway approach to Universal Hollywood Drive is improved with a marked crosswalk, as well as ADA access ramps with yellow truncated domes.

The City's Mobility Plan 2035[3] identifies a collection of arterial streets, known as Pedestrian Enhanced Districts (PEDs), where pedestrian improvements could be prioritized to provide enhanced walking connections to and from the major destinations within communities. As presented in ***Figure 3–3***, Lankershim Boulevard (located within a 0.3-mile radius of the Project Site) has been designated as a PED.

### 3.1.2 *Bicycle Network*

Bicycle access to the Project Site is facilitated by the City's bicycle roadway network. Existing bicycle facilities (e.g., Class I Bicycle Path, Class II Bicycle Lanes, Class III Bicycle Routes, Bicycle Friendly Streets, etc.) identified in the City's 2010 Bicycle Plan are located within an approximately 0.75-mile radius from the Project Site.[4] The 2010 Bicycle Plan goals and policies have been folded into Mobility Plan 2035 to reflect a commitment to a balanced, multi-modal viewpoint.

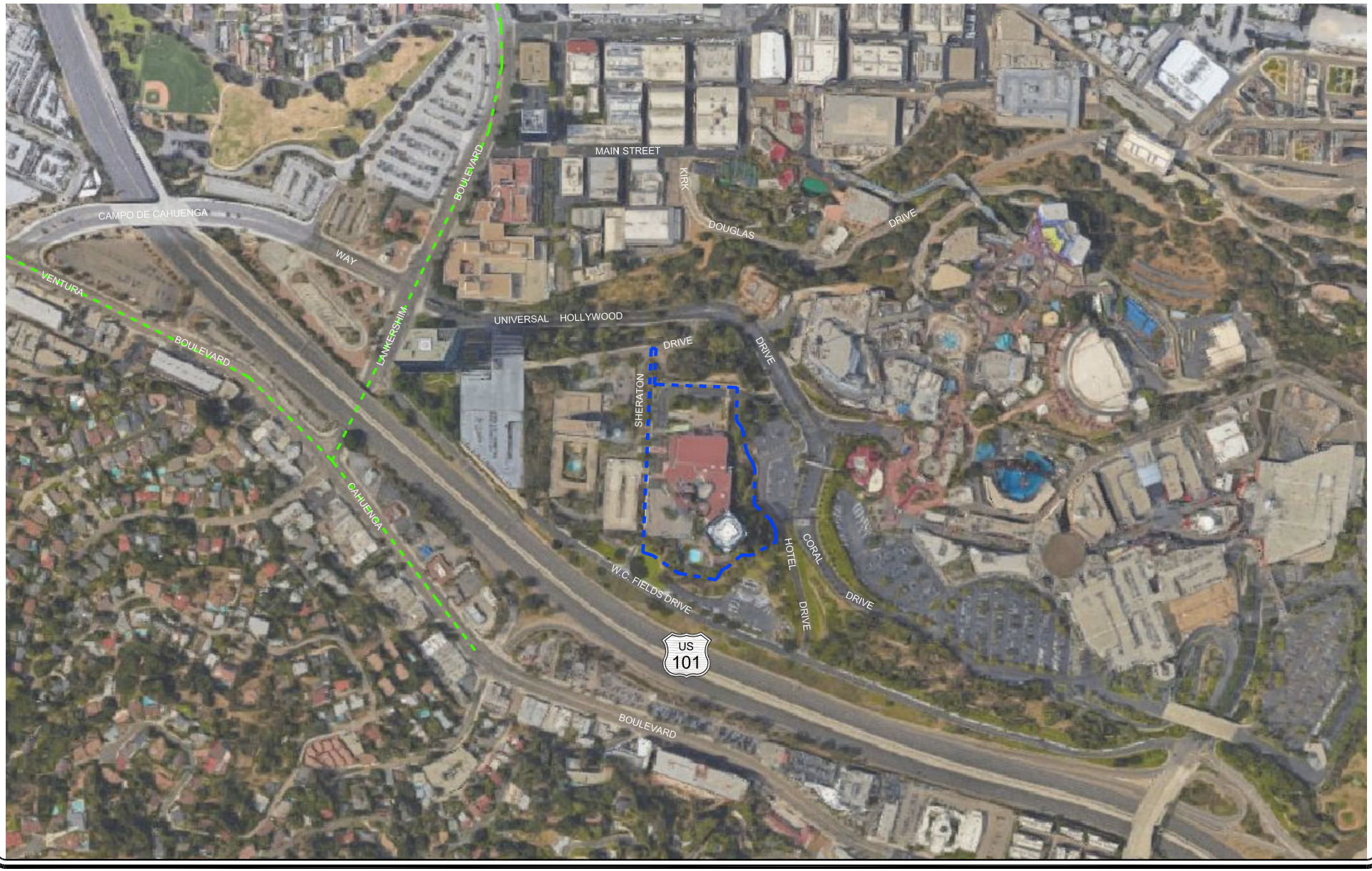
Universal Hollywood Drive has not been identified for bicycle infrastructure within the City's Bicycle Plan. However, Lankershim Boulevard, Ventura Boulevard, and Cahuenga Boulevard have been designated for Class II Bicycle Lanes. Roadways designated within the City's Bicycle Network in close proximity to the Project Site are shown in ***Figure 3–4***.

## 3.2 Transit Framework

The Project Site is located within a Transit Priority Area and is currently served by many local lines and regional/commuter lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. Public transit service in the Project Site area is currently provided by the Los Angeles County Metropolitan Transit Authority (Metro), and the City of Burbank. A summary of the existing transit service, including the transit route, destinations and peak hour headways is presented in ***Table 3–1***. The existing public transit routes in the Project Site vicinity are illustrated in ***Figure 3–5***.

The City's Mobility Plan 2035 identifies a collection of streets, known as the Transit Enhanced Network (TEN), where improvements, in collaboration with transit operators, aim to provide reliable and frequent service that is convenient and safe, increase transit ridership, reduce single-occupancy vehicle trips and integrate transit infrastructure improvements with the identity of the surrounding street. Potential enhancements range from streetscape improvements, installation of transit shelters, or installation of dedicated transit lanes. Roadways within the TEN in close proximity to the Project Site are shown in ***Figure 3–6***.

[3] *Mobility Plan 2035,* Los Angeles Department of City Planning, December 2015.
[4] *2010 Bicycle Plan,* Los Angeles Department of City Planning, Adopted March 1, 2011.




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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
PEDESTRIAN ENHANCED DISTRICT

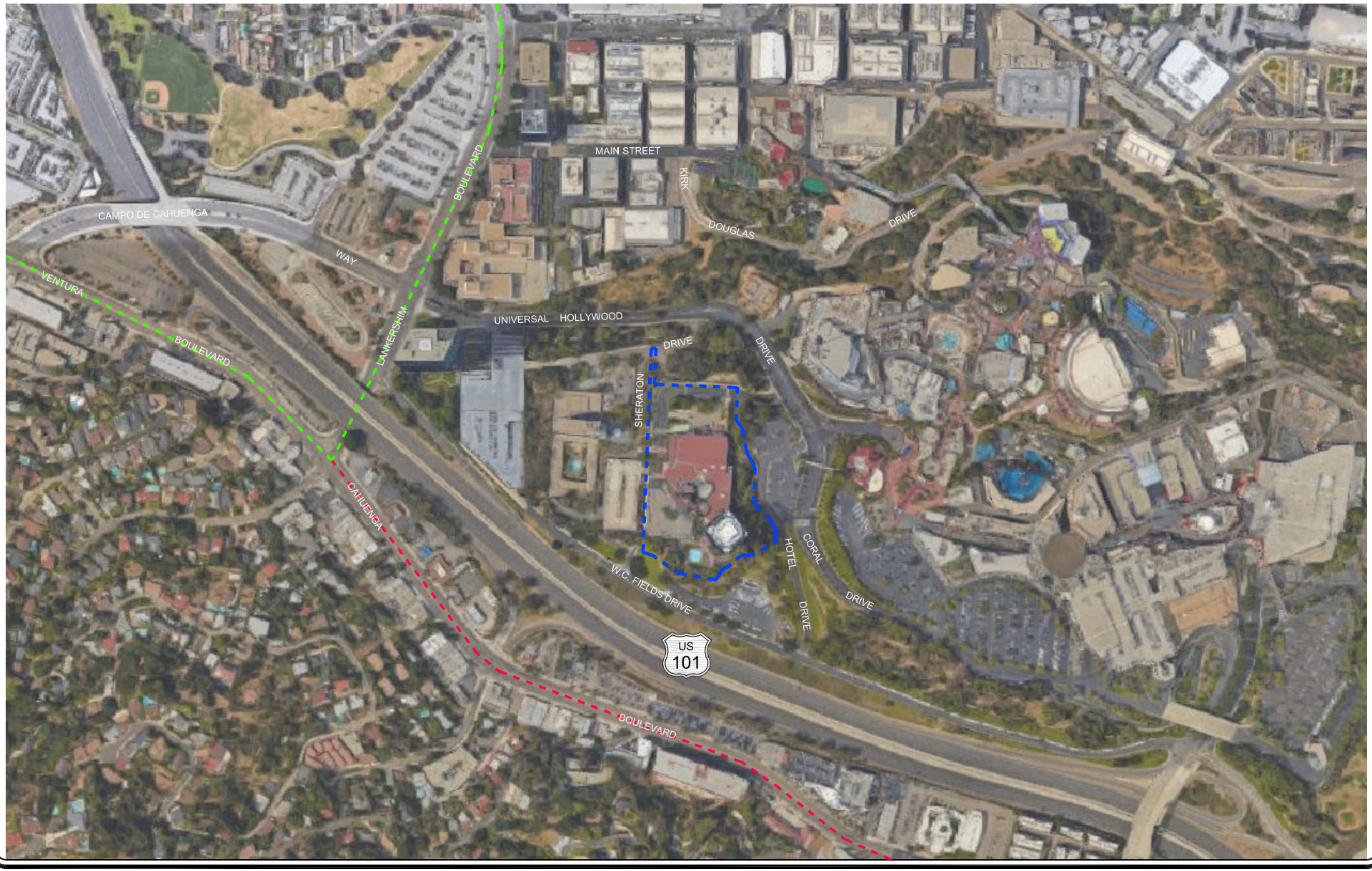
# FIGURE 3-3
# PEDESTRIAN ENHANCED DISTRICTS

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
TIER 1 (BICYCLE ENHANCED NETWORK)
TIER 3 (BICYCLE LANE NETWORK)

# FIGURE 3-4
# BICYCLE NETWORK

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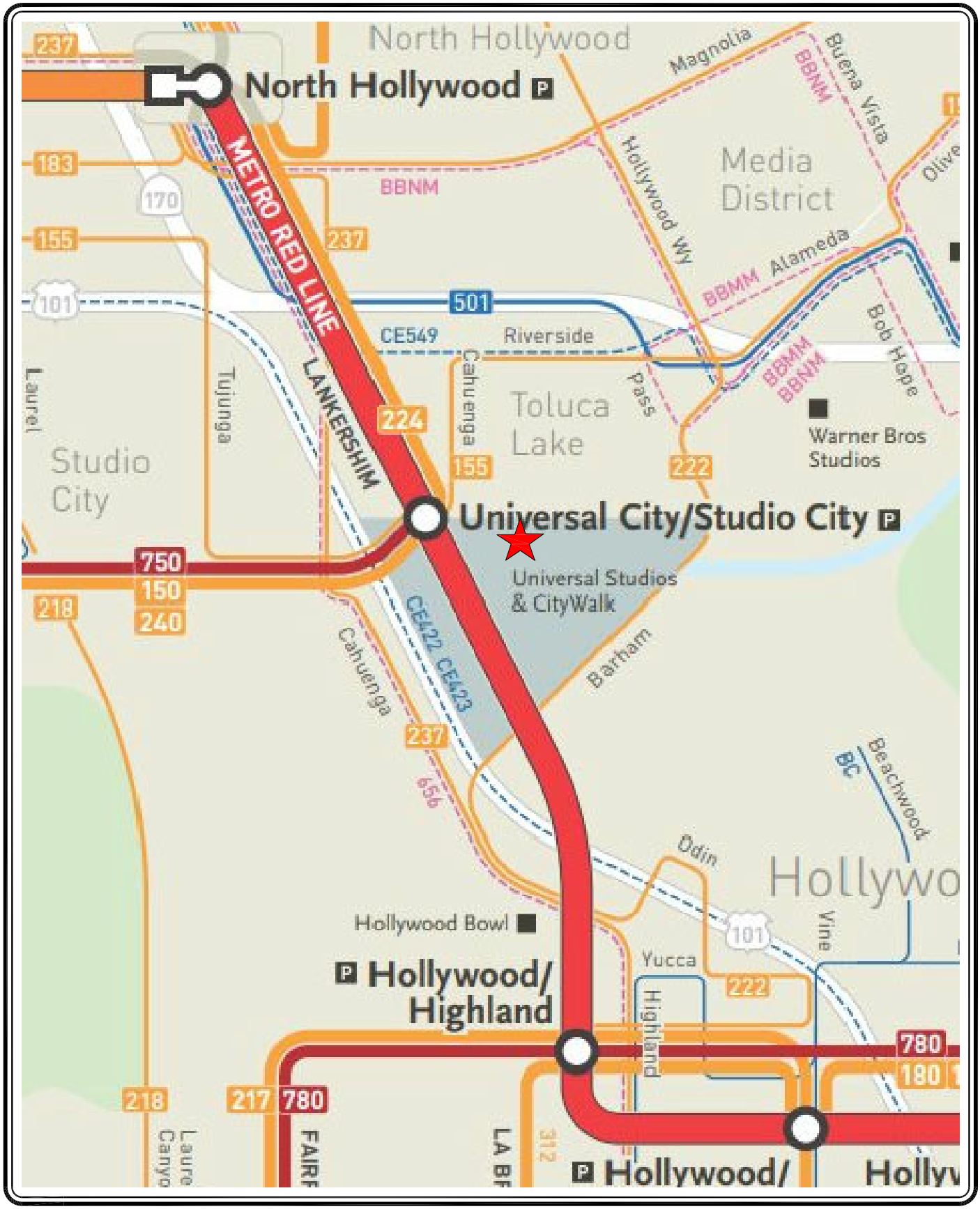
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**Table 3-1**
**EXISTING PUBLIC TRANSIT ROUTES [1]**

28-Sep-20

| ROUTE | DESTINATIONS | ROADWAY(S) NEAR SITE | NO. OF BUSES/TRAINS DURING PEAK HOUR | | |
|---|---|---|---|---|---|
| | | | DIR | AM | PM |
| Metro 150/240 | Studio City to Canoga Park, Northridge<br>(via Ventura Boulevard and Reseda Boulevard) | Campo de Cahuenga Way,<br>Ventura Boulevard | EB<br>WB | 4<br>5 | 5<br>4 |
| Metro 155 | Burbank to Sherman Oaks<br>(via Riverside Drive and Olive Avenue) | Lankershim Boulevard, Campo de Cahuenga Way,<br>Ventura Boulevard | EB<br>WB | 1<br>1 | 2<br>1 |
| Metro 222 | Sun Valley to Hollywood<br>(via Hollywood Way, Barham Boulevard, and Cahuenga Boulevard) | Barham Boulevard, Cahunega Boulevard West,<br>Cahuenga Boulevard East | NB<br>SB | 1<br>1 | 2<br>2 |
| Metro 224 | Sylmar to Studio City<br>(via San Fernando Road and Lankershim Boulevard) | Lankershim Boulevard,<br>Campo de Cahuenga Way | NB<br>SB | 6<br>6 | 3<br>2 |
| Metro 237 | Mission Hills to Hollywood<br>(via Woodley Avenue, Chandler Boulevard, and Lankershim Boulevard) | Lankershim Boulevard, Ventura Boulevard,<br>Cahuenga Boulevard West, Cahuenga Boulevard East | NB<br>SB | 1<br>1 | 2<br>1 |
| Metro Rapid 750 | Studio City to Canoga Park<br>(via Ventura Boulevard) | Campo de Cahuenga,<br>Ventura Boulevard | EB<br>WB | 3<br>3 | 3<br>3 |
| Metro B Line (Red) | North Hollywood to Downtown Los Angeles | Lankershim Boulevard | EB<br>WB | 6<br>3 | 6<br>5 |
| BurbankBus Pink Route | Burbank to Studio City<br>(via Riverside Drive and Olive Avenue) | Lankershim Boulevard,<br>Campo de Cahuenga | EB<br>WB | 4<br>4 | 4<br>4 |
| | | | **Total** | **50** | **49** |

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) website, 2020.
City of Burbank Transit Services (BurbankBus) website, 2020.




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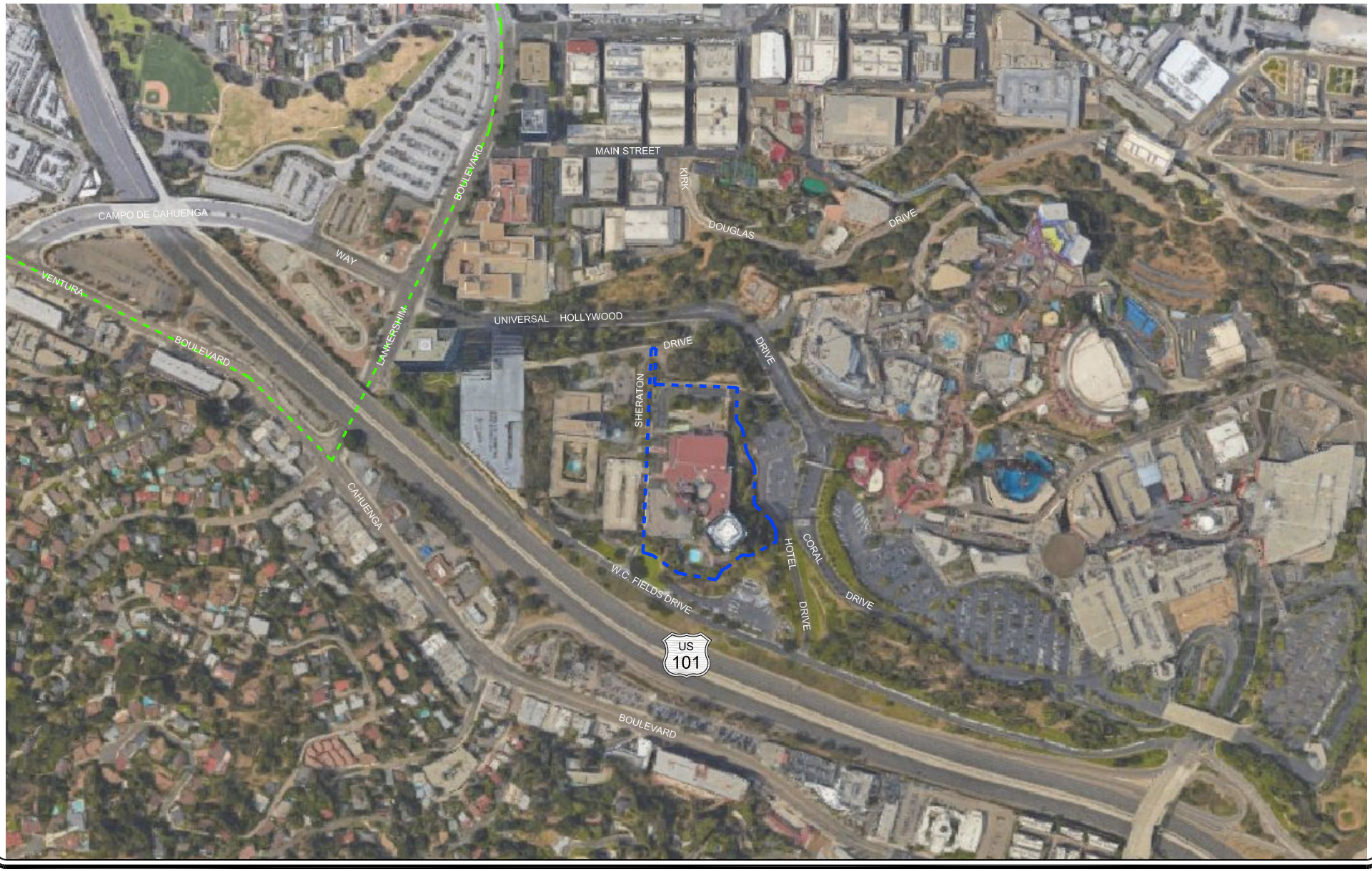
SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY

★ PROJECT SITE

# FIGURE 3-5
# EXISTING PUBLIC TRANSIT ROUTES

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
TRANSIT ENHANCED NETWORK

# FIGURE 3-6
# TRANSIT ENHANCED NETWORK

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## 3.3 Vehicle Network

### 3.3.1 *Regional Highway Access*

Regional vehicular access to the Project Site is primarily provided by the US-101 (Hollywood) Freeway. A brief description of the US-101 Freeway is provided in the following paragraph.

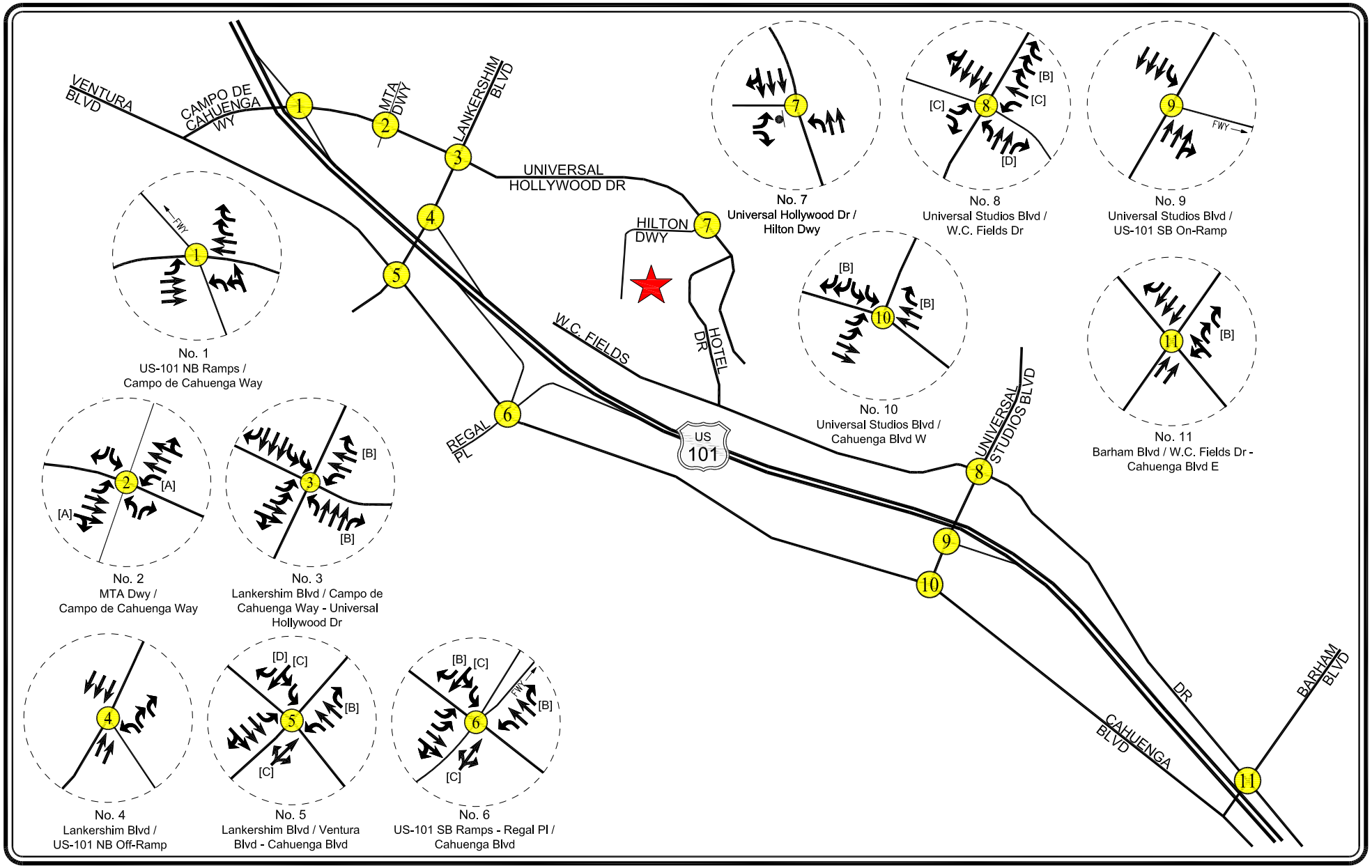
*US-101 (Hollywood) Freeway* is a north-south freeway that extends across northern and southern California. In the Project vicinity, five mixed-flow freeway lanes are provided in each direction on the US-101 Freeway. Northbound and southbound on- and off-ramps are provided at Lankershim Boulevard and Universal Studios Boulevard and are located approximately 0.25 mile west and 0.4 mile east of the Project Site. Additionally, northbound on- and off-ramps are provided at Ventura Boulevard approximately 0.5 mile west of the Project Site.

### 3.3.2 *Local Roadway System*

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

1. US-101 Freeway Northbound Ramps / Campo de Cahuenga Way
2. MTA Driveway / Campo de Cahuenga Way
3. Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive
4. Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp
5. Lankershim Boulevard / Ventura Boulevard – Cahuenga Boulevard
6. US-101 Freeway Southbound Ramps – Regal Place / Cahuenga Boulevard
7. Universal Hollywood Drive / Hilton Driveway
8. Universal Studios Boulevard / W.C. Fields Drive
9. Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp
10. Universal Studios Boulevard / Cahuenga Boulevard West
11. Barham Boulevard / W. C. Fields Drive – Cahuenga Boulevard West

Ten of the 11 study intersections are presently controlled by traffic signals. The Hilton Driveway is a two-way stop-controlled intersection (i.e., a stop sign faces the outbound driveway approach). The existing lane configurations at the 11 study intersections are displayed in ***Figure 3–7***.




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- PROJECT SITE
- STUDY INTERSECTION
- STOP SIGN
- [A] TURNS BY TRANSIT VEHICLES ONLY
- [B] RIGHT-TURN OVERLAP
- [C] SPLIT PHASING
- [D] FREE-FLOW RIGHT-TURN

LINSCOTT, LAW & GREENSPAN, engineers

# FIGURE 3-7
# EXISTING LANE CONFIGURATIONS

HILTON UNIVERSAL CITY PROJECT



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### 3.3.3 *Roadway Descriptions*

Immediate access to the Project Site is provided via Universal Hollywood Drive and Hotel Drive. A brief description[5] of the roadways in the Project vicinity is provided below.

*Lankershim Boulevard* is a north-south oriented roadway located west of the Project Site. Within the Project study area, Lankershim Boulevard is designated as a Boulevard II north of Ventura Boulevard – Cahuenga Boulevard and as a Local Street – Standard south of Ventura Boulevard – Cahuenga Boulevard by the City. Three through travel lanes are provided in each direction on Lankershim Boulevard north of Ventura Boulevard – Cahuenga Boulevard within the Project study area. South of Ventura Boulevard – Cahuenga Boulevard, one through travel lane is provided in each direction on Lankershim Boulevard. Separate exclusive left- and right-turn turn lanes are provided in each direction on Lankershim Boulevard at the Campo de Cahuenga Way – Universal Hollywood Drive intersection, and in the southbound direction at the Ventura Boulevard – Cahuenga Boulevard intersection. Lankershim Boulevard has a posted speed limit of 35 miles per hour north of Ventura Boulevard – Cahuenga Boulevard within the Project study area. There is no speed limit posted on Lankershim Boulevard south of Ventura Boulevard – Cahuenga Boulevard within the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed as stated in the California Vehicle Code Section 22352(b)(1).

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

*Universal Studios Boulevard* is a north-south oriented roadway located southeast of the Project Site. Within the Project study area, Universal Studios Boulevard is designated as a Private Street north of the US-101 Freeway overpass and as a Local Street – Standard south of the US-101 Freeway overpass by the City. North of W.C. Fields Drive, Universal Studios Boulevard is designated as a Private Drive within the County of Los Angeles's Universal Studios Specific Plan. Three through travel lanes are provided in each direction on Universal Studios Boulevard south of the W.C. Fields Drive intersection within the Project study area. North of W.C. Fields Drive, four through travel lanes are provided in each direction on W.C. Fields Drive. Separate exclusive left-turn turn lanes are provided on Universal Studio Boulevard in the northbound direction at the W.C. Fields Drive intersection and in the southbound direction at the US-101 Freeway Southbound On-Ramp intersection. Separate exclusive left- and right-turn lanes are provided in the southbound direction on Universal Studios Boulevard at the Cahuenga Boulevard West intersection. There is no speed limit posted on Universal Studios Boulevard within the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

[5] For reference, the street descriptions provided include designations per the City's *Mobility Plan 2035*.

*Barham Boulevard* is a north-south oriented roadway located southeast of the Project Site. Within the Project study area, Barham Boulevard is designated as an Avenue I Scenic by the City. Two through travel lanes are provided in each direction on Barham Boulevard within the Project study area. A separate exclusive right-turn lane is provided in the southbound direction on Barham Boulevard at the W.C. Fields Drive – Cahuenga Boulevard East intersection. Barham Boulevard has a posted speed limit of 35 miles per hour within the Project study area.

*Campo de Cahuenga Way* is an east-west oriented roadway located northwest of the Project Site. Within the Project study area, the City has not provided a roadway designation for Campo de Cahuenga Way. Three through travel lanes are provided in the eastbound direction on Campo de Cahuenga Way within the Project study area. In the westbound direction, two through travel lanes are provided on Campo de Cahuenga Way east of the MTA Driveway intersection, and three through travel lanes are provided west of the MTA Driveway intersection. Separate exclusive left-turn lanes are provided in the eastbound direction on Campo de Cahuenga Way at the US-101 Freeway Ramps and Lankershim Boulevard intersection. A separate exclusive right-turn lane is provided in the westbound direction on Campo de Cahuenga Way at the US-101 Freeway Ramps intersection. Additionally, a separate exclusive left-turn lane for use by transit vehicles only is provided in the westbound direction on Campo de Cahuenga Way at the MTA Driveway intersection. East of Lankershim Boulevard, Campo de Cahuenga Way becomes Universal Hollywood Drive. There is no speed limit posted on Campo de Cahuenga Way within the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

*Universal Hollywood Drive* is an east-west oriented roadway that borders the northerly frontage of the Project Site. North of the Project Site, Universal Hollywood Drive curves to become a north-south oriented roadway. Within the Project study area, Universal Hollywood Drive is designated as a Private Street by the City. Three through travel lanes are provided in each direction on Universal Hollywood Drive within the Project study area. Separate exclusive left- and right-turn lanes are provided in the westbound direction on Universal Hollywood Drive at the Lankershim Boulevard intersection. West of Lankershim Boulevard, Universal Hollywood Drive becomes Campo de Cahuenga Way. There is no speed limit posted on Universal Studios Boulevard within the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1).

*Ventura Boulevard* is an east-west oriented roadway located west of the Project Site. Within the Project study area, Ventura Boulevard is designated as a Boulevard II by the City. Two through travel lanes are provided in each direction on Ventura Boulevard within the Project study area. A separate exclusive left-turn lane is provided in the eastbound direction on Ventura Boulevard at the Lankershim Boulevard intersection. East of Lankershim Boulevard, Ventura Boulevard becomes Cahuenga Boulevard. Ventura Boulevard has a posted speed limit of 35 miles per hour within the Project study area.

*Cahuenga Boulevard* is an east-west oriented roadway located south of the Project Site. Within the Project study area, Cahuenga Boulevard is designated as a Boulevard II by the City. Two

through travel lanes are provided in each direction on Ventura Boulevard within the Project study area. Separate exclusive left-turn lanes are provided on Cahuenga Boulevard in each direction at the US-101 Freeway Southbound Ramps – Regal Place intersection, in the westbound direction at the Lankershim Boulevard intersection, and in the eastbound direction at the Universal Studios Boulevard intersection. Separate exclusive right-turn lanes are provided on Cahuenga Boulevard in the westbound direction at the Lankershim Boulevard, US-101 Freeway Southbound Ramps – Regal Place, and Universal Studios Boulevard intersections. West of Lankershim Boulevard, Cahuenga Boulevard becomes Ventura Boulevard. Cahuenga Boulevard has a posted speed limit of 35 miles per hour within the Project study area.

*W.C. Fields Drive* is an east-west oriented roadway located south of the Project Site. Between Barham Boulevard and Universal Studios Boulevard, W.C. Fields Drive is a one-way eastbound roadway. Within the Project study area, W.C. Fields Drive is designated as a Private Street west of Universal Studios Boulevard and as a Local Street – Standard east of Universal Studios Boulevard by the City. One through travel lane is provided in each direction on W.C. Fields west of Universal Studios Boulevard within the Project study area. Three through travel lanes are provided in the eastbound direction on W.C. Fields east of Universal Studios Boulevard within the Project study area. Separate exclusive left- and right-turn lanes are provided in each direction on W.C. Fields Drive at the Universal Studios Boulevard intersection. East of Barham Boulevard, W.C. Fields Drive becomes Cahuenga Boulevard East. There is no speed limit posted on W.C. Fields Drive west of Universal Studios Boulevard within the Project study area, thus a prima facie speed limit of 25 miles per hour is assumed, consistent with California Vehicle Code Section 22352(b)(1). East of Universal Studios Boulevard, W.C. Fields Drive has a posted speed limit of 40 miles per hour within the Project study area.

*Cahuenga Boulevard East* is an east-west oriented roadway located southeast of the Project Site. Cahuenga Boulevard East is a one-way westbound roadway within the Project study area. Within the Project study area, Cahuenga Boulevard East is designated as a Local Street – Standard by the City. Two through travel lanes are provided in the westbound direction on Cahuenga Boulevard East within the Project study area. Separate exclusive right-turn lanes are provided on Cahuenga Boulevard East at the Barham Boulevard intersection. West of Barham Boulevard, Cahuenga Boulevard East becomes W.C. Fields Drive. Cahuenga Boulevard East has a posted speed limit of 40 miles per hour within the Project study area.

### 3.3.4 *City of Los Angeles High Injury Network*

Vision Zero[6] is a citywide initiative which prioritizes the safety of pedestrians and bicyclists on public streets, with the understanding that roads which are safe for vulnerable users will be safer for all users, in an effort to eliminate traffic fatalities. Key elements of the policy, such as reducing traffic speeds, are founded on the principles of engineering, education, enforcement, evaluation, and equity. Originating in Sweden, the policy has been adopted in numerous other North American cities, including California cities such as San Francisco and San Diego.

[6] Vision Zero Los Angeles 2015-2025, August 2015.

Mayor Eric Garcetti issued Executive Directive No. 10 in August 2015, formally launching the Vision Zero initiative in Los Angeles. Vision Zero is also a stated safety objective in the Mobility Plan 2035, which sets the goal of zero traffic deaths by 2035. Jointly directed by LADOT and the Police Department, Vision Zero takes a multi-disciplinary approach to identifying safety risk factors and implementing solutions on a citywide scale. Using a methodology originally developed by the San Francisco Public Health Department, the Vision Zero Task Force has identified streets where investments in safety will have the most impact in reducing severe injuries and traffic fatalities in the City. These roads are collectively known as the High Injury Network (HIN). The HIN will be reviewed by the LADOT's Vision Zero group for potential engineering re-design as well as educational and enforcement campaigns.

If a proposed project results in significant transportation impacts, LADOT's Vision Zero group will review those specific locations and immediate vicinity for potential safety enhancements that are consistent with the City's Vision Zero initiative. As no roads within the direct vicinity of the Project Site (e.g., within one-quarter mile) have been identified within the HIN, the need for potential safety enhancement consistent with the City's Vision Zero initiative is not anticipated.

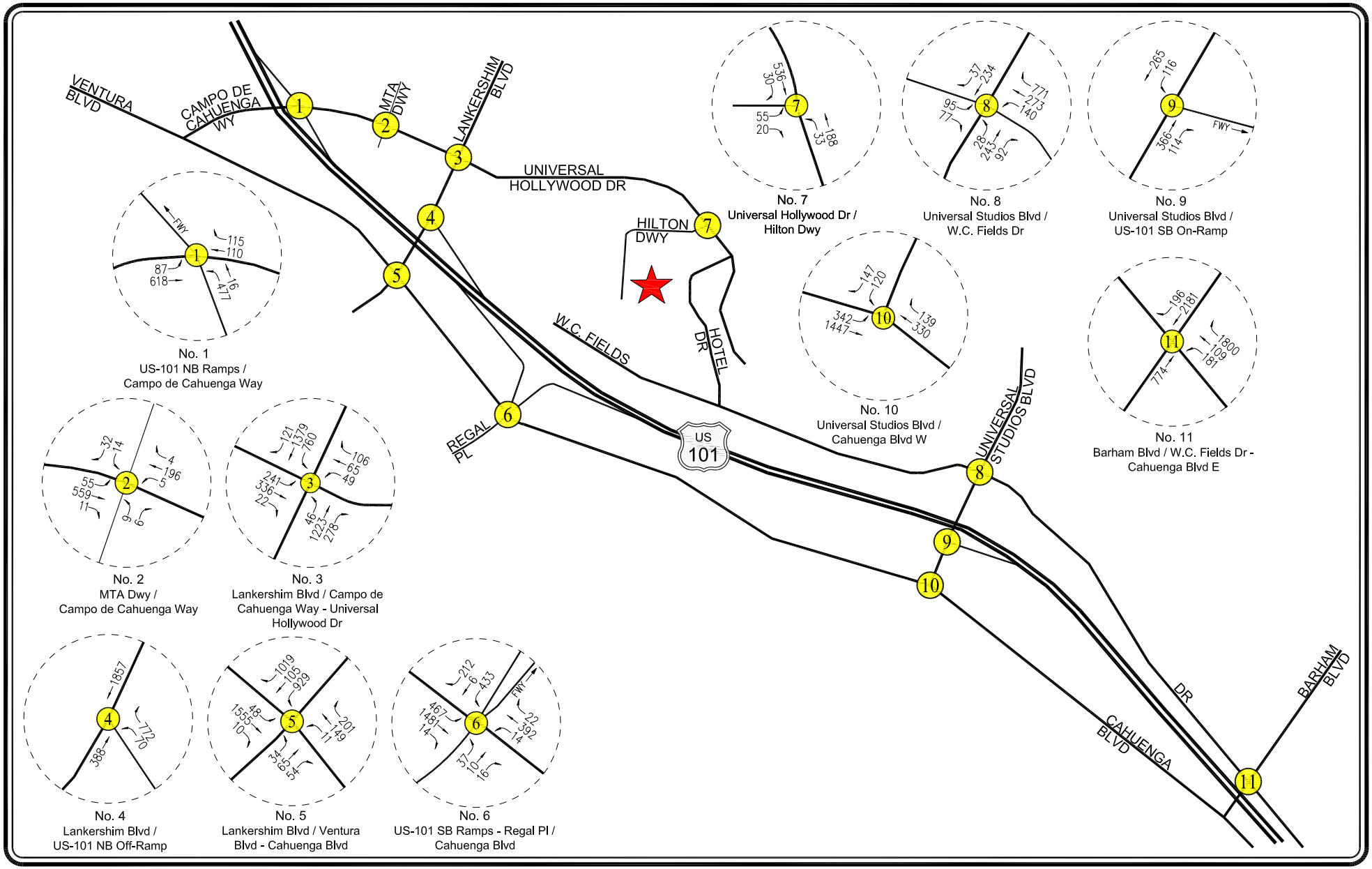
## 3.4 Traffic Counts

In response to the COVID-19 pandemic, in April 2020, LADOT issued guidance[7] to transportation consultants related to traffic count data to be used in transportation assessments prepared in accordance with the City's TAG. Because traffic count data could not be collected at the study intersections due to the COVID-19 pandemic, LADOT has directed transportation consultants to use historical data, with appropriate modifications to represent current year (2020 pre-pandemic) traffic volume conditions. For this transportation assessment, peak hour traffic volume data collected at the study intersections in 2018 were increased by a 1.0% annual growth rate to estimate current year (2020) traffic volumes. The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County* ("CMP manual") and determined in consultation with LADOT staff. Based on review of the general traffic growth factors provided in the CMP manual for the Project Site area (Regional Statistical Area [RSA] 13, Burbank, which includes the Project Site), the existing traffic volumes are expected to increase at an annual rate of approximately 0.38% per year between the years 2015 and 2025. Thus, application of an annual growth factor of 1.0% annual growth results in a conservative, worst-case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Furthermore, the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity.

Further discussion of the annual traffic growth rate is provided in Section 3.5.2.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 3–8*** and ***3–9***, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in ***Appendix C***.

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




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NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

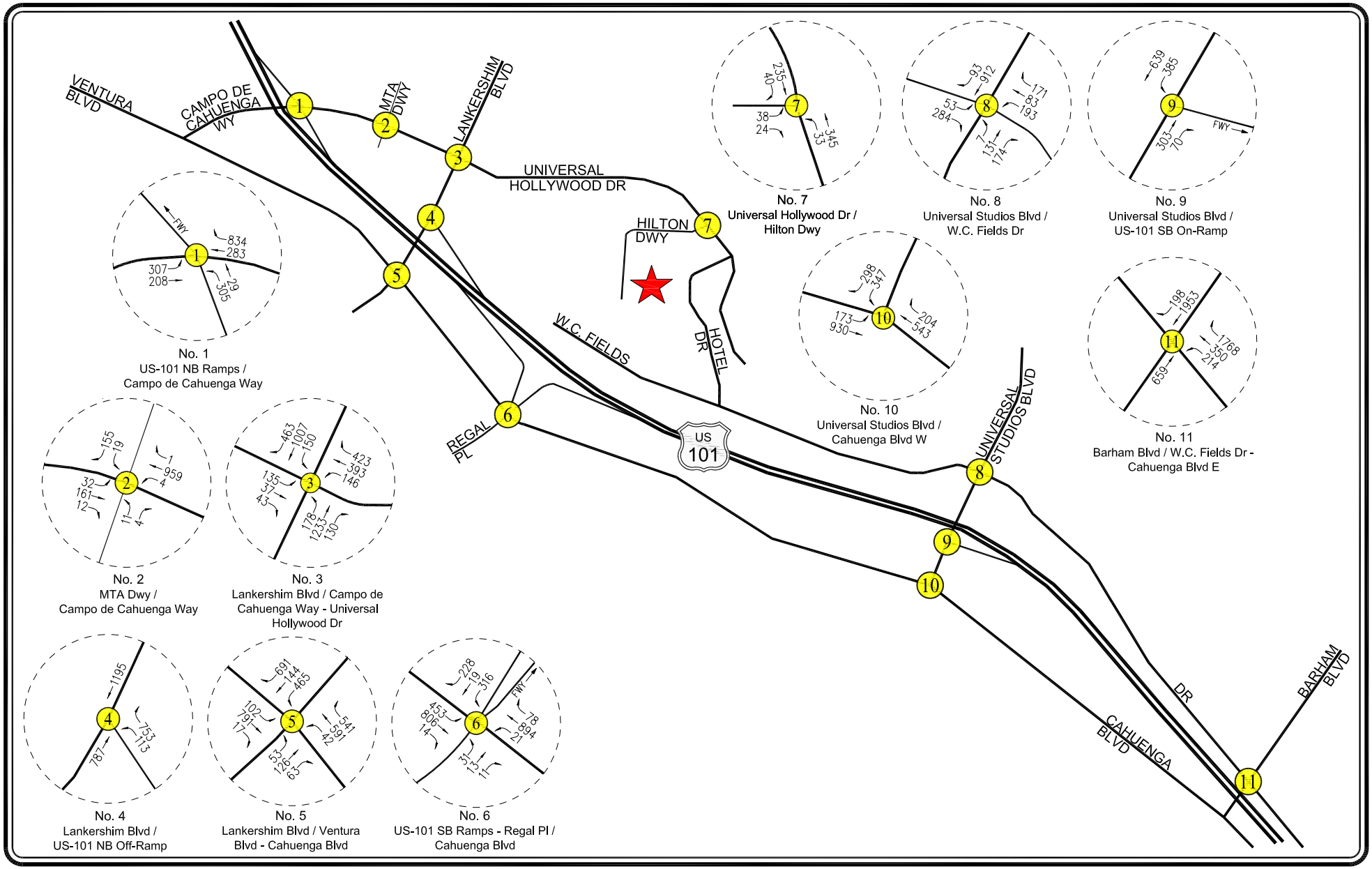
# FIGURE 3-8
# EXISTING TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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# FIGURE 3-9
# EXISTING TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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## 3.5 Cumulative Development Projects

### 3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the Project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the Project can be evaluated within the context of the cumulative impact of all ongoing development. The related projects research was based on information on file at LADOT. Per the TAG, related projects within a radius of one-quarter mile from the farthest outlying study intersection should be included. Therefore, related projects within a 1.15-mile radius (one-quarter mile past the farthest outlying study intersection, Barham Boulevard / W.C. Fields Drive – Cahuenga Boulevard East) of the Project Site were included. The list of related projects in the Project Site area is presented in ***Table 3–2***. The location of the related projects is shown in ***Figure 3–10***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the ITE *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3–2*. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 3–11*** and ***3–12***, respectively.

### 3.5.2 *Ambient Traffic Growth*

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year up to and including the year 2025, which is the anticipated year of Project buildout. The ambient growth factor was based on general traffic growth factors provided in the CMP manual and determined in consultation with LADOT staff. Based on review of the general traffic growth factors provided in the CMP manual for the Project Site area (RSA 13, Burbank, which includes the Project Site), the existing traffic volumes are expected to increase at an annual rate of approximately 0.38% per year between the years 2015 and 2025. Thus, application of an annual growth factor of 1.0% annual growth results in a conservative, worst-case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Furthermore, the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity.

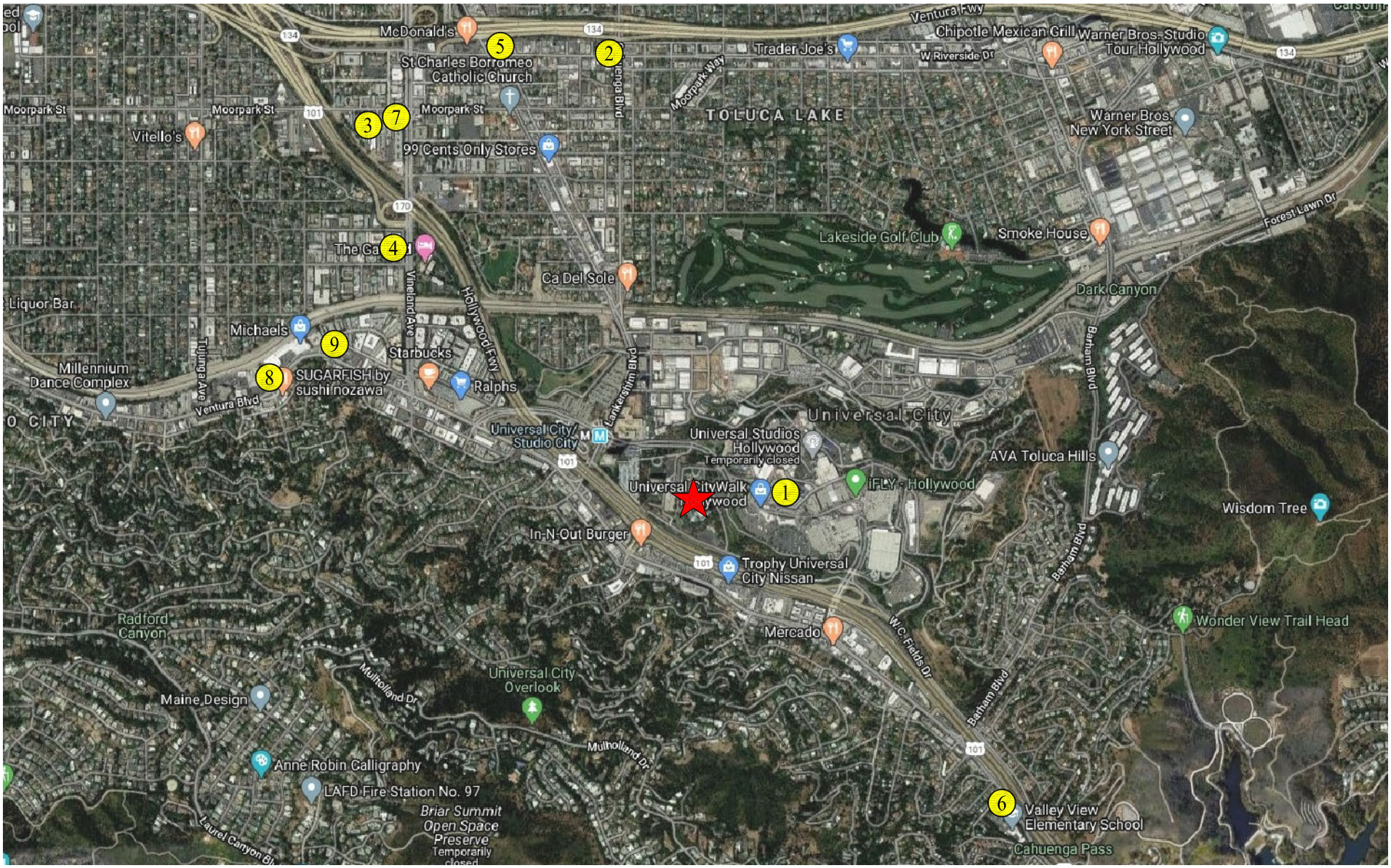
Therefore, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient growth traffic factor based on CMP traffic model data results in an even more conservative estimate of future traffic volumes at the study intersections.

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

06-Oct-20

| MAP NO. | PROJECT NAME/ PROJECT NUMBER | PROJECT STATUS | ADDRESS/ LOCATION | LAND USE DATA | | PROJECT DATA SOURCE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LAND-USE | SIZE | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| 1 | NBC Universal Evolution Plan | Approved | 555 E. Universal Hollywood Drive | Studio<br>Studio Office<br>Office<br>Entertainment<br>Entertainment Retail<br>Amphitheater<br>Hotel | 307,949 GSF<br>647,320 GSF<br>470,247 GSF<br>177,447 GSF<br>39,216 GLSF<br>(50,600) GSF<br>900,000 GSF | [3] | 19,139 | 1,271 | 489 | 1,760 | 307 | 1,391 | 1,698 |
| 2 | Cohen Apartments | Approved | 10601-10623 Riverside Drive | Apartments<br>Retail | 68 DU<br>12,451 GSF | | 1,083 | 17 | 39 | 56 | 47 | 36 | 83 |
| 3 | 11036 W. Moorpark Street Apartments Project | Under Construction | 11036 W. Moorpark Street | Apartments<br>Single-Family Homes | 96 DU<br>(8) DU | | 506 | 7 | 32 | 39 | 31 | 16 | 47 |
| 4 | 4215 Vineland Avenue Condominiums Project | Approved | 4215 Vineland Avenue | Condominiums<br>Apartments<br>Single-Family Homes | 85 DU<br>(32) DU<br>(1) DU | [4] | 271 | 3 | 17 | 20 | 15 | 8 | 23 |
| 5 | Lankershim/Riverside Mixed-Use Project | Approved | 10850 Riverside Drive | Apartments<br>Retail | 179 DU<br>5,684 GLSF | [5] | 1,336 | 21 | 62 | 83 | 69 | 44 | 113 |
| 6 | 3077 Cahuenga Boulevard Studio Apartments Project | Proposed | 3077 Cahuenga Boulevard | Apartments | 179 DU | | 299 | 5 | 18 | 23 | 10 | 18 | 28 |
| 7 | Gas Station with Convenience Store and Car Wash | Proposed | 4377 N. Vineland Avenue | Convenience Store<br>Car Wash | 2,555 GSF<br>1,100 GSF | | 645 | 21 | 22 | 43 | 20 | 21 | 41 |
| 8 | 11201 Ventura Boulevard Mixed-Use Project | Approved | 11201 Ventura Boulevard | Apartments<br>Affordable Family Housing<br>Retail<br>Assisted Living | 94 DU<br>12 DU<br>1,201 GSF<br>(58) Beds | [6] | 462 | 5 | 26 | 31 | 23 | 10 | 33 |
| 9 | Studio City Crossings | Proposed | 11265-11321 Ventura Boulevard | Supermarket<br>Commercial<br>Restaurant<br>Commercial<br>Health/Fitness Club<br>Restaurant | 35,278 GSF<br>5,855 GSF<br>2,775 GSF<br>(17,541) GSF<br>(17,810) GSF<br>(2,775) GSF | [7] | 1,827 | 20 | 2 | 22 | 68 | 74 | 142 |
| **TOTAL** | | | | | | | 25,568 | 1,370 | 707 | 2,077 | 590 | 1,618 | 2,208 |

[1] Source: City of Los Angeles Department of Transportation Related Projects List.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: NBC Universal Evolution Plan Environmental Impact Report Alternative 10, August 2012.
[4] Source: Technical Memorandum for the 4215 Vineland Condominiums Project, prepared by Linscott, Law & Greenspan, Engineers, April 19, 2016.
[5] Source: Technical Memorandum for the Lankershim/Riverside Mixed-Use Project, prepared by Linscott, Law & Greenspan, Engineers, September 17, 2018.
[6] Source: Revised Traffic Assessment for the Proposed Mixed-Use Project at 11201 Ventura Boulevard, Los Angeles Department of Transportation, January 29, 2019.
[7] Source: Transportation Assessment Memorandum of Understanding for the Studio City Crossings Project, prepared by Linscott, Law, & Greenspan, Engineers, September 2020.




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MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ RELATED PROJECT

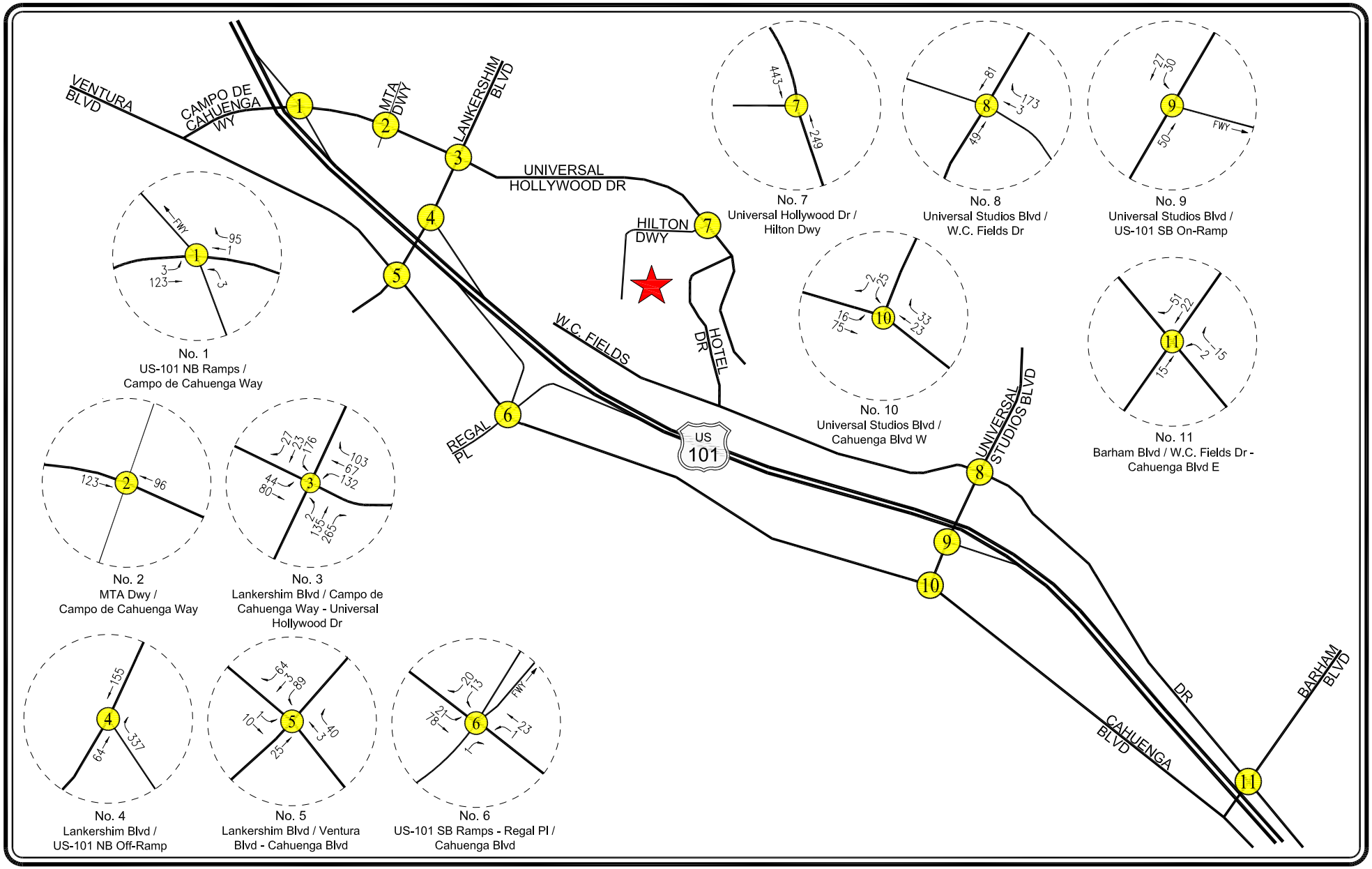
# FIGURE 3-10
# LOCATION OF RELATED PROJECTS

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT



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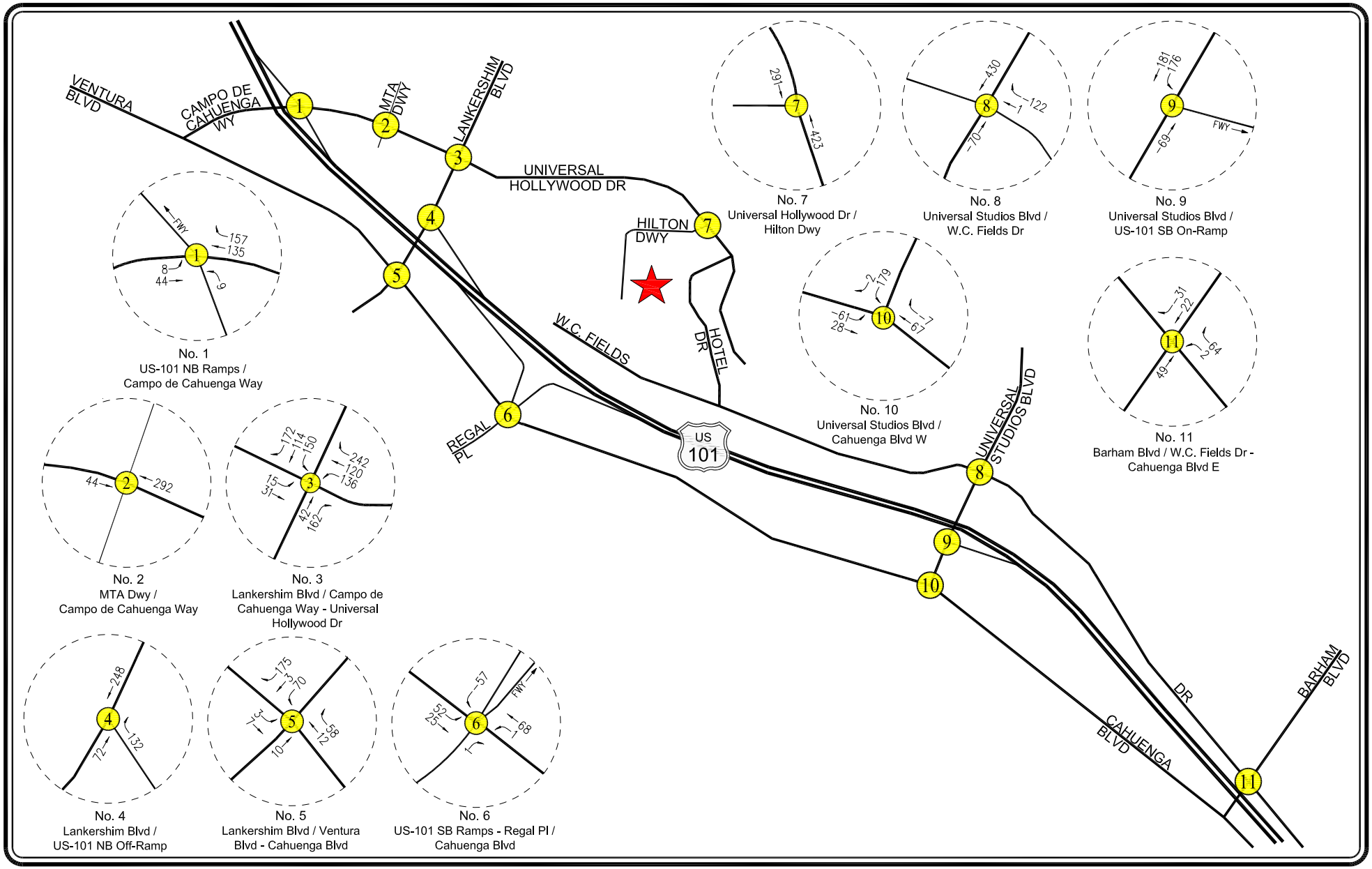
# FIGURE 3-11
# RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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PROJECT SITE
STUDY INTERSECTION

NOT TO SCALE

# FIGURE 3-12
# RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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# 4.0 CEQA ANALYSIS OF TRANSPORTATION IMPACTS

## 4.1 Conflicting with Plans, Programs, Ordinances, or Policies (Threshold T-1)

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

As stated in Section 2.1.1 of the TAG, proposed projects shall be analyzed to identify potential conflicts with adopted City plans and policies and, if there is a conflict, improvements that prioritize access for and improve the comfort of people walking, bicycling, and riding transit in order to provide safe and convenient streets for all users should be identified. Projects designed to encourage sustainable travel help to reduce vehicle miles traveled. This section provides a review of the screening criteria and a summary of the Project's consistency with the City's adopted transportation-related plans and policies.

### 4.1.1 *Screening Criteria*

Per Section 2.1.2 of the TAG, if the Project requires a discretionary action, and the answer is yes to any of the following questions, further analysis is required to assess whether the Project would conflict with adopted City plans, programs, ordinances, or policies that establish the transportation planning framework for all travel modes:

- Does the project require a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent, and provisions of the General Plan?
    - Yes, the Project requires a discretionary action.
- Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?
    - No, the Project is not known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety.
- Is the project proposing to, or required to make any voluntary or required modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?
    - No, the Project is not proposing to, nor is it required to make any modifications to the public right-of-way.

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

### 4.1.2 *Impact Criteria and Methodology*

The impact criteria set forth in Appendix G to the State CEQA Guidelines, as well as Section 2.1.3 of the City's TAG, regarding conflicts with plans, programs, ordinances, or policies (referred to as Threshold T-1 in the TAG) are as follows:

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

The threshold test is to assess whether a project would conflict with an adopted program, policy, plan, or ordinance that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multimodal transportation options and a reduction in VMT. Conversely, a project would not always have a significant impact merely based on whether or not it would implement a particular transportation-related program, plan, policy, or ordinance. Many of these programs must be implemented by the City itself over time, and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the City from implementing adopted programs, plans and policies.

The methodology for determining a project's transportation impact associated with conflicts with plans, programs, ordinances, or policies is described in the TAG as follows:

- A project that generally conforms with and does not obstruct the City's development policies and standards will generally be considered to be consistent. The Project Applicant should review the documents and ordinances identified in the TAG (refer to Table 2.1-1 on Page 2-3) for City plans, policies, programs, ordinances and standards relevant to determining project consistency. TAG Attachment D: Plan Consistency Worksheet provides questions that must be answered in order to help guide whether the project conflicts with City circulation system policies. A "yes" or "no" answer to these questions does not determine a conflict. Rather, as indicated in TAG Attachment D, the Project Applicant must provide substantiating information to help determine whether the proposed project precludes the City's implementation of any adopted policy and/or program that was adopted to protect the environment. A mere conflict with adopted transportation related policies, or standards that require administrative relief or legislative change does not in itself constitute an impact.

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

Per Section 2.1.4 of the TAG, the analysis of cumulative impacts may be quantitative or qualitative. Each of the plans, ordinances, and policies reviewed to assess potential conflicts with proposed projects should be reviewed to assess cumulative impacts that may result from the proposed project in combination with other development projects in the study area. In addition,

the cumulative analysis should also consider planned transportation system improvements within the study area as identified in consultation with LADOT.

Related projects to be considered in the cumulative analysis are known development projects located within a one-half mile radius of the Project Site. Please refer to the list of related projects identified in *Table 3–2* and *Figure 3–10* for the location of the related projects in relation to the Project Site.

### 4.1.3 *Review of Project Consistency*

This section provides a summary of the consistency review that compares the characteristics of the Project and site design features (i.e., including the site access and circulation scheme) with the City's relevant plans and policies. ***Appendix D*** provides the Plans, Policies, and Programs Worksheet from the TAG, and provides additional detail regarding the plans, programs, ordinances, and policies review.

As confirmed in *Appendix D*, the Project would not conflict with the relevant City plans, policies and programs and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. The Project is not project proposing to, or required to make any voluntary or required modifications to the public right-of-way, and would therefore not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions. The Project will not conflict with any plans or policies that govern the public right-of-way, such as LADOT's Manual of Policy and Procedures (MPP) Section 321, Driveway Design, and the Citywide Design Guidelines – Guideline 2. Furthermore, the Project will utilize TDM strategies to reduce dependence on single-occupancy vehicles. The Project has been found to be consistent with the greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Region Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Additionally, the Project has been found to be consistent with the transportation-related elements of the Plan for a Healthy Los Angeles (Healthy LA), Vision Zero, the Mobility Hubs Reader's Guide, the Walkability Checklist, and the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan.

Therefore, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities, and the impact would therefore be "less than significant". Furthermore, the Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance in LAMC Section 12.26.J) and other requirements pursuant to the LAMC.

### 4.1.4 *Review of Cumulative Consistency*

Per Section 2.1.4 of the TAG, the analysis of cumulative consistency requires consultation and confirmation with LADOT and the City's Department of City Planning (LADCP).

As with the Project, the related projects would include adequate bicycle facilities and include high density urban uses in proximity to the nearby multimodal transportation facilities. The

related projects, as with the Project, would not conflict with adjacent street designations and classifications. No street widenings would be necessary for these projects. Accordingly, there would be no significant cumulative impacts to which both the Project and other nearby related projects contribute to in regard to transportation policies or standards adopted to protect the environment and support multimodal transportation options and a reduction in VMT.

Based on the discussion and conclusion in the preceding Section 4.1.3, the guiding language contained in the City's TAG, and review of related projects in the Project vicinity, this documentation is sufficient to demonstrate that there is also no cumulative inconsistency with the City's plans, policies, ordinances and programs, and therefore, the Project's cumulative impact would be less than significant. In addition, since the Project does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives, there is no cumulative inconsistency that can be determined.

## 4.2 VMT Analysis (Threshold T-2.1)

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

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

Comprehensive updates to the State CEQA Guidelines were certified and adopted by the California Natural Resources Agency in December 2018. Accordingly, the City adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G question:

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

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

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

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

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

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

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

In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses[8] are assumed to have less than significant VMT impacts. If the answer to the following question is no, then that portion of the project meets the screening criteria and a no impact determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's VMT, as specified in Subsection 2.2.4 of the TAG.

- If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet?

### 4.2.1 *Impact Criteria and Methodology*

Per Section 2.2.3 of the TAG, a development project will have a potential VMT impact if the project meets the following:

[8] As noted in the TAG, the definition of "retail" for this purpose includes restaurant uses.

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

- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

- For regional serving retail projects, the project would result in a net increase in VMT.

- For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above.

Different VMT significance thresholds have been established for each APC boundary area as the characteristics of each are distinct in terms of land use, density, transit availability, employment, etc. The City's significance thresholds (i.e., provided on a daily household VMT per capita basis and a daily work VMT per employee basis) for each of the seven APC boundary areas are presented in ***Table 4–1***. As the Project Site is located within the South Valley Area Planning Commission (APC), the VMT impact criteria (i.e., 15% below the APC average) applicable to the Project is 11.6 Daily Work VMT per Employee.

The impact methodology set forth in the TAG for a mixed-use project such as the Project is as follows:

- Mixed-Use Projects. The project VMT impact should be considered significant if any one (or all) of the project land uses exceed the impact criteria for that particular land use, taking credit for internal capture. In such cases, mitigation options that reduce the VMT generated by any or all of the land uses could be considered.

### 4.2.2 *Summary of Project VMT Analysis*

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

- The Project is estimated to generate a total of 3,711 daily vehicle trips.

- The estimated Daily Work VMT per Employee for the Project is 8.7 Daily Work VMT per Employee, which is less than the South Valley APC significance threshold of 11.6 Daily Work VMT per Employee.

It is noted that the Project will incorporate TDM strategies as Project Design Features, as described in Section 2.10 herein. Per direction from LADCP, TDM strategies may only be considered as Project Design Features if the VMT impact without consideration of these strategies is less than significant. Accordingly, the daily vehicle trips and VMT expected to be

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

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

[1] Source: *LADOT Transportation Assessment Guidelines,* July 2020.

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

generated by the Project without consideration of TDM strategies were also calculated using Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the proposed Project are contained in ***Appendix E***. As indicated in the summary VMT Calculator worksheet, the Project, without consideration of TDM strategies, is forecasted to generate the following:

- The Project would be estimated to generate a total of 4,233 daily vehicle trips.
- The estimated Daily Work VMT per Employee for the Project would be 9.9 Daily Work VMT per Employee, which is less than the South Valley APC significance threshold of 11.6 Daily Work VMT per Employee.

Based on the above, the Project would not have a significant VMT without consideration of the TDM strategies described in Section 2.10 herein. The Project Design Features would further reduce the Daily Work VMT per Employee expected to be generated by the Project. Thus, based on the above analyses, the Project is not expected to result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT.

### 4.2.3 *Summary of Cumulative VMT Analysis*

As stated in the Section 2.2.4 of the City's TAG document, analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed Project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the SCAG's) RTP/SCS. The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and GHG reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, as noted in the City's TAG document, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) in the analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

Based on the above Project-related VMT analysis and the conclusions reported in Section 4.2.2 (i.e., which conclude that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), the Project's cumulative VMT impact would be less than significant.

## 4.3 Geometric Design (Threshold T-3)

As stated in the City's TAG (refer to Section 2.4.1 thereof), impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access

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

### 4.3.1 *Screening Criteria*

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

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?

  - No, the Project proposes to utilize the existing driveway currently serving the Project Site.

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

  As stated in the City's TAG document (refer to page 28 of the TAG), for the purpose of the screening for projects that are making physical changes to the public right-of-way, determine the street designation and improvement standard for any project frontage along streets classified as an Avenue or Boulevard (as designated in the City's General Plan) using the Mobility Plan 2035, or NavigateLA, an online portal managed by the City's Bureau of Engineering (BOE). If any street fronting the project site is an Avenue or Boulevard and it is determined that additional dedication, or physical modifications to the public right-of-way are proposed or required, the answer to this question is yes. For projects not subject to dedication and improvement requirements under the LAMC, though the project does propose dedications or physical modifications to the public right-of-way, which may also include new physical modifications along streets classified as either Collectors or Locals, the answer to this question is yes. Based on a review of the Project, the following answer is provided:

  - No, the Project is not proposing or required to make any modifications to the public right-of-way.

### 4.3.2 *Impact Criteria and Methodology*

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

- Threshold T-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

    - No, the Project would not substantially increase hazards due to a geometric design feature. The Project will utilize the existing driveway for vehicular access and does not propose any modifications to the public right-of-way.

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

- The relative amount of pedestrian activity at project access points.

- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.

- The type of bicycle facilities the project driveway(s) crosses and the relative level of utilization.

- The physical conditions of the site and surrounding area, such as curves, slopes, walks, landscaping or other barriers, that could result in vehicle/pedestrian, vehicle/bicycle, or vehicle/vehicle impacts.

- The project location, or project-related changes to the public right-of-way, relative to proximity to the High Injury Network or a Safe Routes to School program area.

- Any other conditions, including the approximate location of incompatible uses that would substantially increase a transportation hazard.

For vehicle, bicycle and pedestrian safety impacts, the City's TAG (refer to Section 2.4.4 thereof) indicate that a review of all project access points, internal circulation, and parking access from an operational and safety perspective (for example, turning radii, driveway queuing, line of sight for turns into and out of project driveway[s]) should be conducted. Where project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result should be considered. In areas with

moderate to high levels of pedestrian or bicycle activity, the collection of pedestrian or bicycle count data may be required.

### 4.3.3 *Qualitative Review of Site Access Points*

As the answer is "no" to both screening criteria questions, no further analysis is required to assess whether the Project would result in impacts due to geometric design hazards or incompatible uses. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, and the Project's impact would be less than significant.

### 4.3.4 *Freeway Safety Analysis*

It is noted that the City issued an interim guidance on the preparation of a freeway safety analysis for land use projects.[9] If the answer is yes to the following question, a freeway safety analysis will be required to assess whether the Project would lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting freeway off-ramps and vehicles operation on the freeway mainline:

- Does the land use Project add 25 or more trips to any nearby freeway off-ramp serving the Project Site in either the morning or afternoon peak-hour?
    - Yes, as shown in *Figures 2–6* and *2–7*, the Project would add 28 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour. As shown in *Figures 2–6* and *2–7*, the Project would not add 25 or trips during the weekday AM and PM peak hours at other freeway off-ramps in the immediate vicinity of the Project Site.

Per the City's guidance, if Project traffic is expected to cause or add to a queue extending onto the freeway mainline by less than two car lengths, the Project would cause a less than significant safety impact. The analysis was prepared based on the *Highway Capacity Manual*[10] (HCM) operational analysis methodology pursuant to the City's TAG. The analysis was prepared utilizing the *HCS7* software package, which implements the HCM operational methods. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS7* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to Subsection 2.9.1
- Project Trip Distribution and Assignment: Refer to Subsection 2.9.2

[9] *LADOT Transportation Assessments – Interim Guidance for Freeway Safety Analysis,* City of Los Angeles Department of Transportation, May 2020.
[10] *Highway Capacity Manual 6th Edition,* Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.

- Existing Vehicle Network: Refer to Subsection 3.3
- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4
- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to Subsection 3.5

The operational analysis of vehicle queuing at the off-ramp was prepared for the following conditions:

(a) Existing (2020) conditions.

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2025 and with completion and occupancy of the related projects (i.e., future cumulative baseline)

(d) Condition (c) with completion and occupancy of the Project.

Pursuant to the City's TAG, the HCM methodology for signalized unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the 95$^{th}$ percentile queues (in feet) for all approaches for the off-ramp intersection. The 95$^{th}$ percentile queue is the maximum back of queue with 95$^{th}$ percentile traffic volumes. The HCM 6$^{th}$ Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.

The assessment of the off-ramps includes a review of the vehicle queue length as compared to the total available queueing capacity of the ramp to determine whether the vehicle queue would extend beyond the length of the ramp onto the mainline. To this end, the queueing analysis looks at two separate components of the ramp capacity: the length of each approach lane to the intersection, and the remaining length of the ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline. The queue may exceed the striped length of a given approach lane, as long as there is sufficient additional queueing capacity on the ramp, it will not spill over onto the mainline. The summary of the operational analysis of the off-ramp intersection is provided in ***Table 4–2***. The HCM methodology worksheets for the analyzed off-ramp are contained in ***Appendix F***.

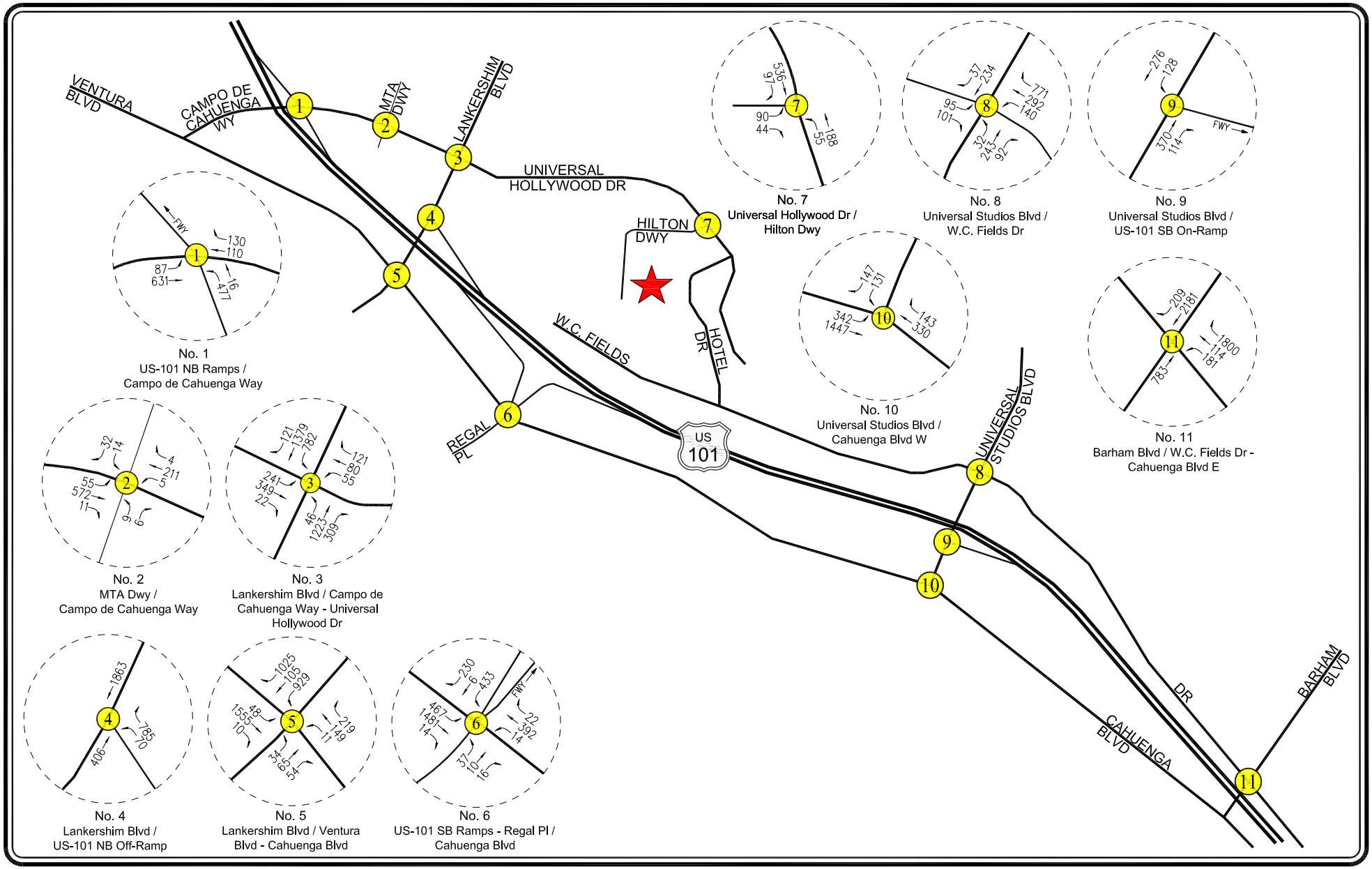
The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–6* and *3–7*, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 4–1*** and ***4–2***, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 4–3*** and ***4–4***, respectively. The "Future Cumulative with

**Table 4-2**
**FREEWAY OFF-RAMP QUEUE EVALUATION**
**US-101 FREEWAY SOUTHBOUND OFF-RAMP AT LANKERSHIM BOULEVARD**
**WEEKDAY PM PEAK HOUR**

17-Nov-20

| NO. | INTERSECTION | RAMP AND LANE DESCRIPTION | VEHICLE STORAGE CAPACITY [a] | [1] YEAR 2020 EXISTING | | [2] YEAR 2020 EXISTING W/ PROJECT | | | | [3] YEAR 2025 FUTURE W/O PROJECT | | [4] YEAR 2025 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] |
| 6 | Cahuenga Boulevard / US-101 Freeway Southbound Ramps - Regal Place | US-101 Southbound Off-Ramp | | | | | | | | | | | | | |
| | | Left | 300 | 258.3 | NO | 258.3 | NO | 0.0 | NO | 224.6 | NO | 224.6 | NO | 0.0 | NO |
| | | Shared Left/Through | 300 | 149.9 | NO | 149.9 | NO | 0.0 | NO | 133.4 | NO | 133.4 | NO | 0.0 | NO |
| | | Right | 300 | 219.7 | NO | 245.4 | NO | 25.7 | NO | 230.6 | NO | 256.5 | NO | 25.9 | NO |
| | | Ramp [d] | 564 | 0.0 | NO | 0.0 | NO | 0.0 | NO | 0 | NO | 0 | NO | 0.0 | NO |

[a] Expressed in feet.
[b] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized intersections was utilized to calculate vehicle queuing. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.
[c] Pursuant to *LADOT Transportation Assessments – Interim Guidance for Freeway Safety Analysis,* May 2020, a freeway safety impact shall be deemed significant if a Project is expected to cause or add to a queue extending onto the freeway mainline by more than two vehicle lengths.
[d] The Ramp is the remaining length of the off-ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline.




PROJECT SITE
STUDY INTERSECTION

N

NOT TO SCALE

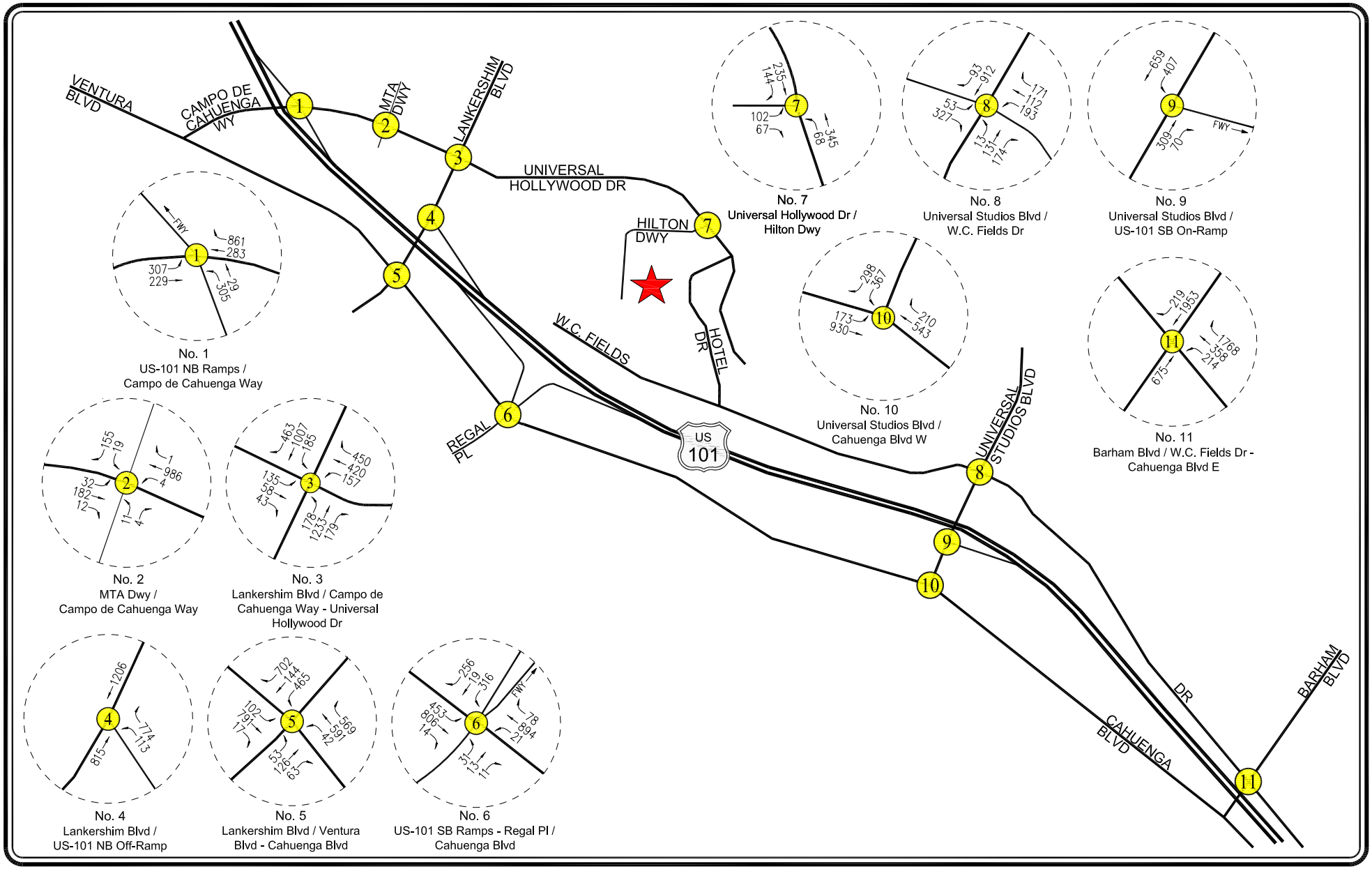
# FIGURE 4-1
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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PROJECT SITE
STUDY INTERSECTION

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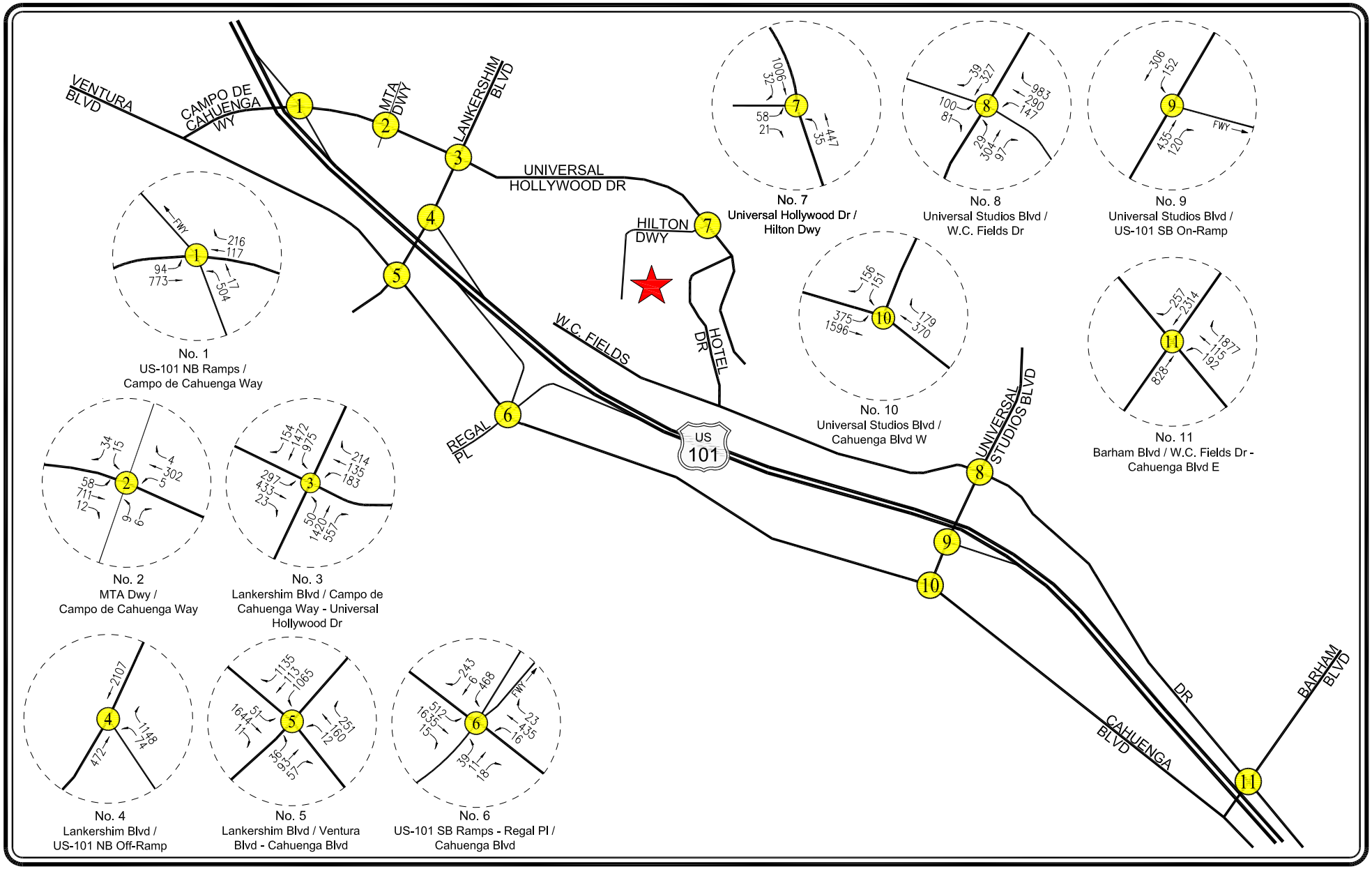
# FIGURE 4-2
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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PROJECT SITE
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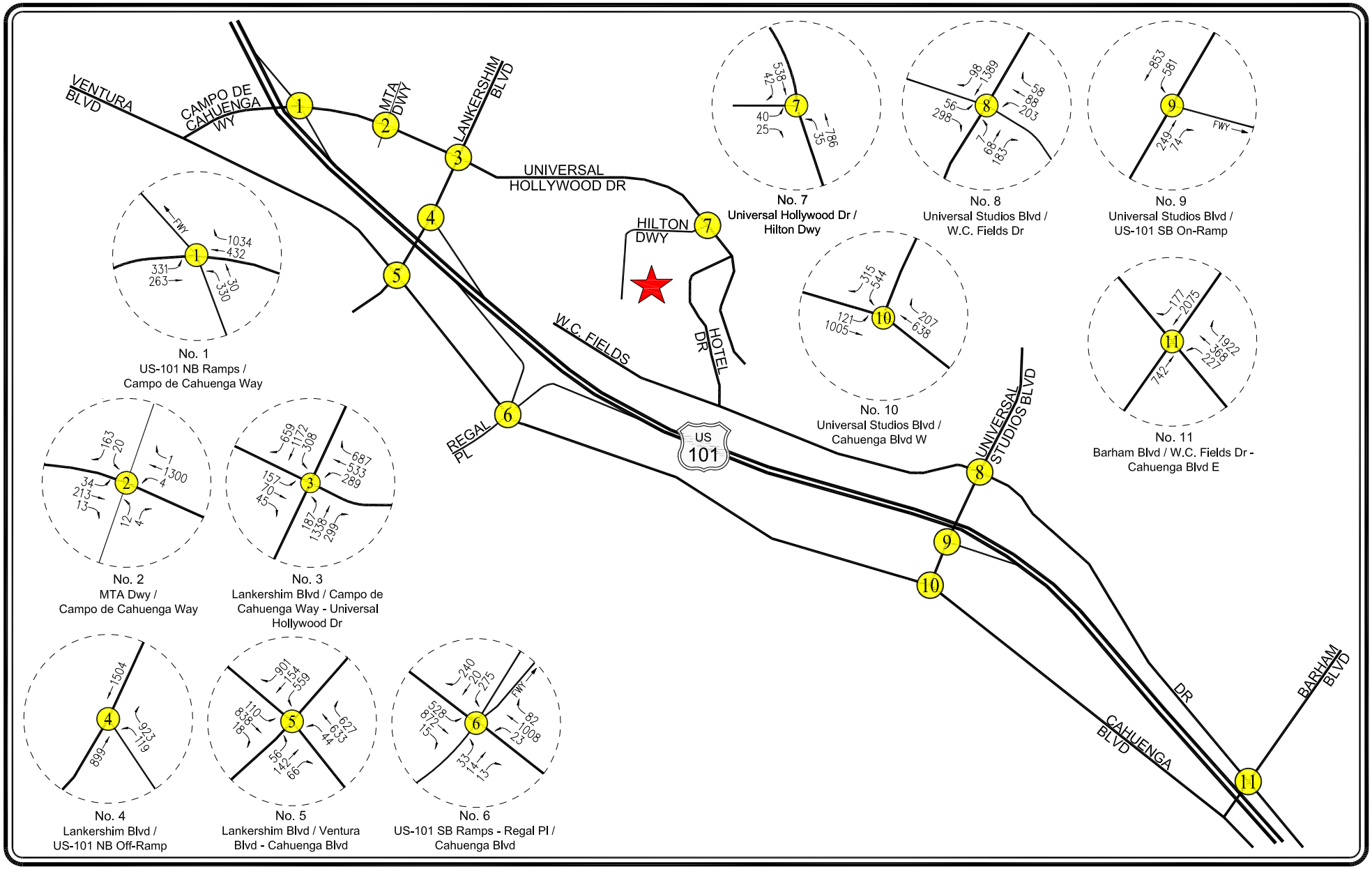
# FIGURE 4-3
# FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

# FIGURE 4-4

# FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 4–5*** and ***4–6***, respectively.

As shown in *Table 4–2*, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project conditions increases by 25.9 feet (i.e., just over one vehicle) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. Furthermore, the vehicle queue will not extend onto the mainline. Therefore, the Project would cause a less than significant freeway safety impact.

## 4.4 CEQA Transportation Measures

### 4.4.1 *Transportation Demand Management*

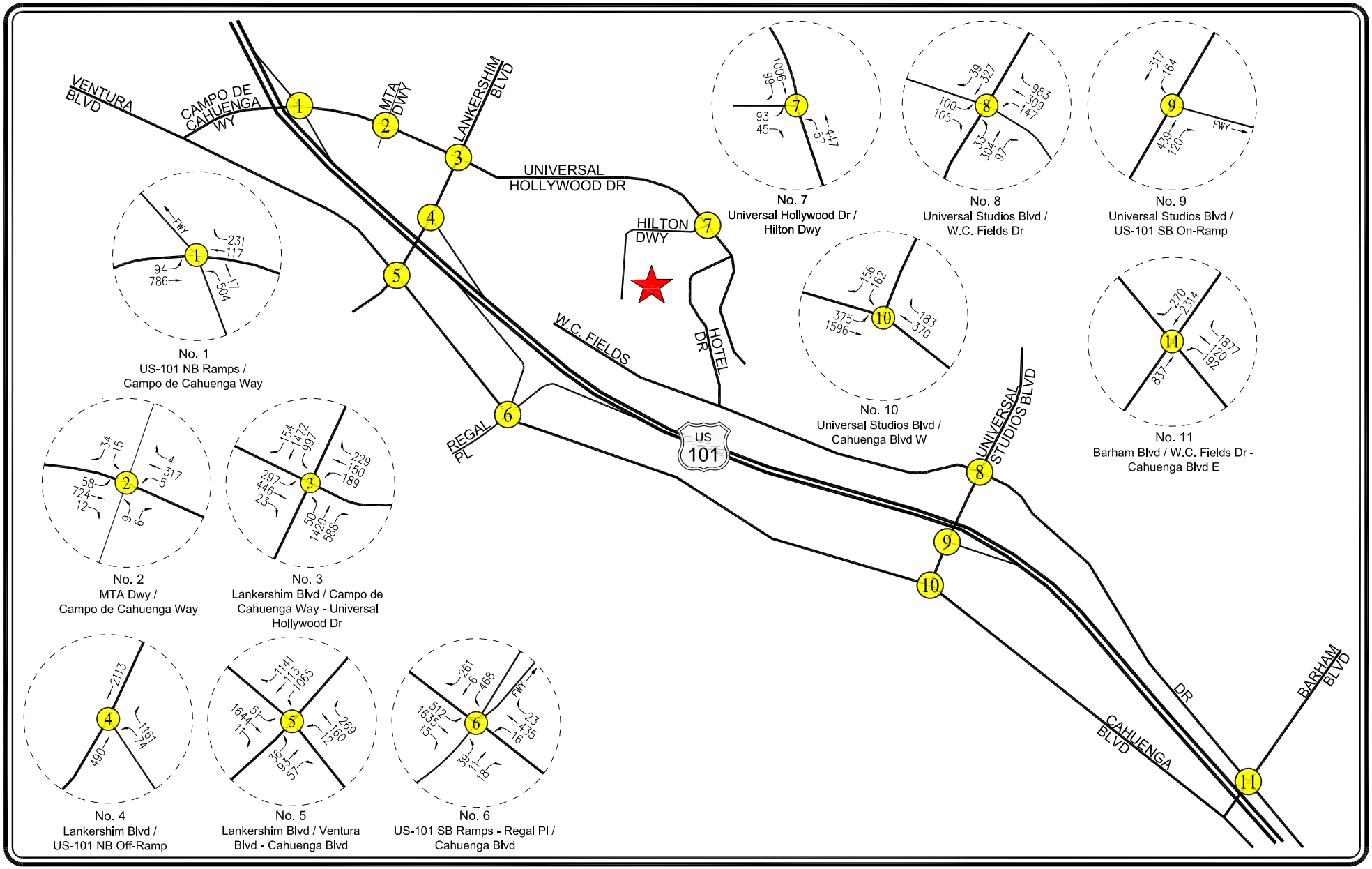
The Project includes four TDM strategies as Project Design Features and are described in detail in Section 2.10 above. The TDM strategies include:

- Transit Subsidies;
- Promotions and Marketing;
- Include Bicycle Parking per LAMC; and
- Include Secure Bike Parking and Showers.

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

### 4.4.2 *CEQA Transportation Summary*

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




PROJECT SITE
STUDY INTERSECTION

N
NOT TO SCALE

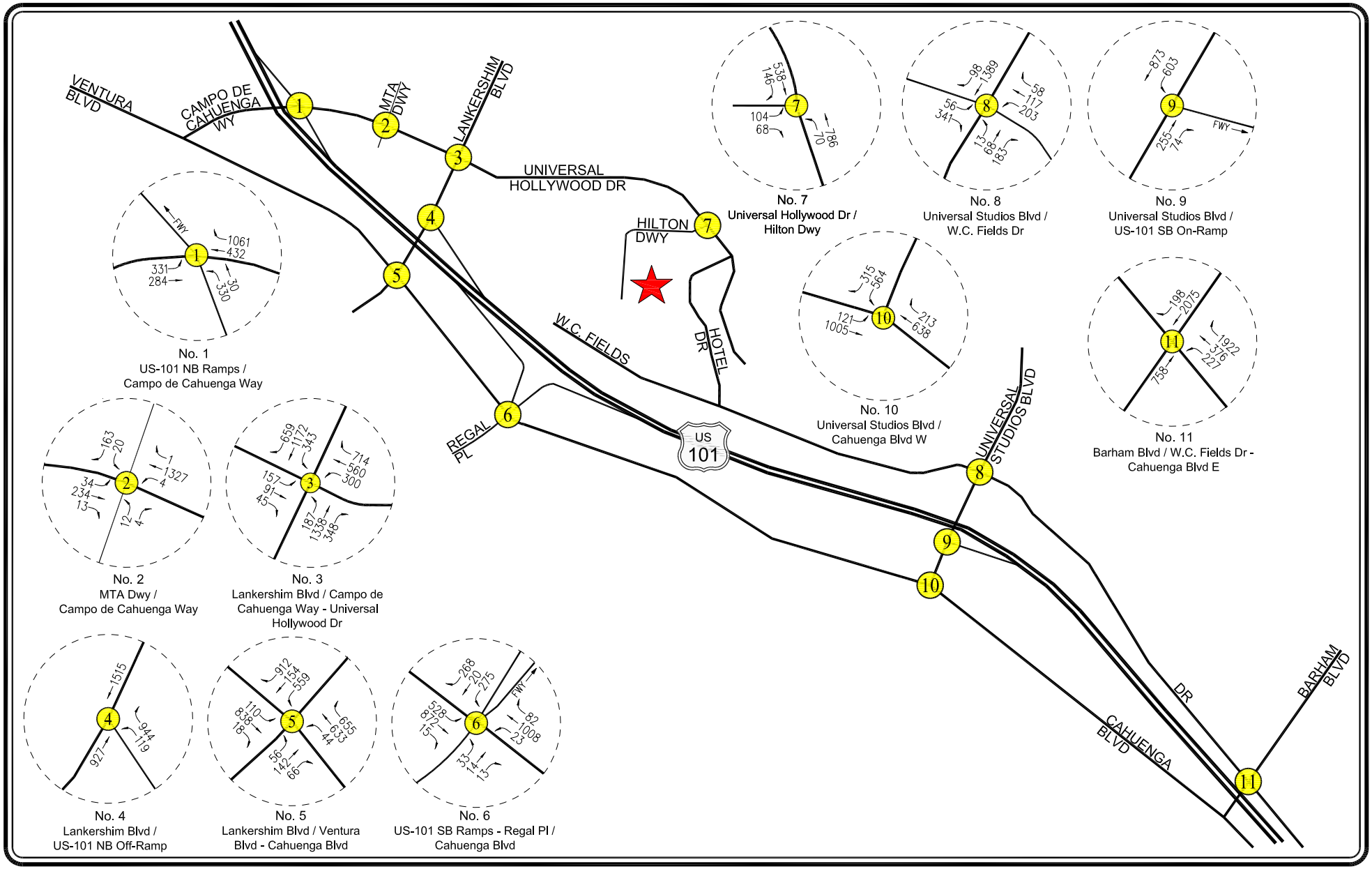
# FIGURE 4-5
# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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PROJECT SITE
STUDY INTERSECTION

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NOT TO SCALE

# FIGURE 4-6
# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



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# 5.0 NON-CEQA ANALYSIS

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

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

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

## 5.1 Pedestrian, Bicycle, and Transit Access

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

### 5.1.1 *Screening Criteria*

Per Section 3.2.2 of the TAG, if the answer is yes to all of the following questions, further analysis is required to assess whether the Project would negatively affect existing pedestrian, bicycle, or transit facilities:

- Does the land use project involve a discretionary action that would be under review by LADCP?
  - Yes, the Project involves a discretionary action that would be reviewed by LADCP.
- Does the land use project include the construction, or addition of 50 dwelling units or guestrooms or combination thereof, or 50,000 square feet of non-residential space?
  - Yes, the Project proposes the construction of 395 hotel guestrooms, as well as the construction of ancillary facilities including 10,000 square feet of meeting room space and 5,000 square feet of ballroom space, 12,000 square feet of quality restaurant floor space, and 10,000 square feet of spa space (for 250 non-hotel guests). The total non-

residential building floor area is 37,000 square feet. The Project would add approximately 300,000 square feet of new building floor area.

- Would the project generate a net increase of 1,000 or more daily vehicle trips, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City's General Plan) 250 linear feet or more, or is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard (as designated in the City's General Plan)?

    - Yes, the Project will generate a net increase 1,000 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix B*), the Project will generate 4,223[11] net new daily vehicle trips. The Project Site has frontage directly on Universal Hollywood Drive and Hotel Drive. Universal Hollywood Drive is designated as a Private Street by the City. Hotel Drive is a Private Drive within the County of Los Angeles's Universal Studios Specific Plan and is not included within the Mobility Plan 2035 Street Standards Plan. While Hotel Drive is a Private Drive, trips bound to and from the Project Site have the legal ability to utilize Hotel Drive. Neither of the Project Site's frontages encompass an entire block.

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

### 5.1.2 *Evaluation Criteria*

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

- Would a project directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian, bicycle, or transit facilities, such as:

    - Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts

    - Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.)

    - Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities

    - Removal of other existing transportation system elements supporting sustainable mobility

[11] For screening purposes, the number of daily vehicle trips without reductions from implementation of TDM strategies are reported.

- Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds

- Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way

- Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.)

- Would a project intensify use of existing pedestrian, bicycle, or transit facilities, such as:

  - Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's MPP Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.

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

  - Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, or unlit areas.

The locations and descriptions of pedestrian, bicycle and transit facilities in the Project Site vicinity that could be affected by Project-related traffic or by users traveling between the Project Site and nearby destinations is presented in Section 3.0 herein. Potential pedestrian destinations located within an approximately one-quarter mile (i.e., 1,320 feet) radius from the Project Site are noted in *Figure 3–1*. The existing pedestrian and transit facilities within an approximately one-quarter mile (i.e., 1,320 feet) radius from the Project Site are noted in *Figure 3–2*. The location of the City's Bicycle Network within the immediate Project Site vicinity and in the surrounding area is shown in *Figure 3–4*. The location of the City's PEDs, Bicycle Network, and TEN within the immediate Project Site vicinity and in the surrounding area is shown in *Figures 3–3*, *3–4*, and *3–6*, respectively.

### 5.1.3 *Results of Qualitative Access Review*

***Table 5–1*** summarizes the City's criteria associated with the two guiding questions regarding the pedestrian, bicycle, and transit access assessment and the determination of potential Project-related effect on the subject facilities in the vicinity of the Project. The determination is based on whether the Project would create deficiencies that could be physical (through removal, modification, or degradation of facilities) or demand-based (by adding pedestrian or bicycle demand to inadequate facilities). As indicated in *Table 5–1*, it is determined the Project does not

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

28-Sep-20

| CRITERIA | PROJECT RESPONSE | FURTHER QUANTITATIVE ASSESSMENT? |
|---|---|---|
| ***PERMANENT REMOVAL OR MODIFICATION OF FACILITIES*** | | |
| Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts. | **No** | **No** |
| Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.). | **No** | **No** |
| Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities. | **No** | **No** |
| Removal of other existing transportation system elements supporting sustainable mobility. | **No** | **No** |
| Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds. | **No** | **No** |
| Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way. | **No** | **No** |
| Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.). | **No** | **No** |
| ***INTENSIFY USE OF FACILITIES*** | | |
| Increase in pedestrian or vehicle volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's Manual of Policies and Procedures (MPP) Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing. | **The Project may nominally increase pedestrians attempting to cross Universal Hollywood Drive at the Hilton Driveway. Signalized crossings are available within 140 feet of the intersection at Hotel Drive. Additionally, a pedestrian bridge is provided across Coral Drive. Access to the pedestrian bridge is located approximately 300 feet south of the Hilton Driveway, across Hotel Drive. Therefore, the need for a marked crosswalk is not warranted per LADOT MPP Section 344.** | **No** |
| Result in new pedestrian demand between project site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.). | **The Project may nominally increase pedestrians walking to local destinations and/or transit stops. There are no observed missing pedestrian facilities in the Project vicinity.** | **No** |
| Increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, unshaded, or unlit areas. | **The Project may nominally increase pedestrians walking to local transit stops. A Universal Studios Shuttle Bus stop is located approximately 550 east of the Hilton Driveway. The Shuttle Bus provides roundtrip service to the stop located down Universal Hollywood Drive, just east of the Lankershim Boulevard intersection. A Metro pedestrian bridge provides access to the Universal City/Studio City Station and bus stops at the intersection of Lankershim Boulevard / Campo de Cahuenga-Universal Hollywood Drive, which is signalized and provides crosswalks with pedestrian phasing.** | **No** |

include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As also noted in *Table 5–1*, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity, however, such use is not expected to result in a deficient condition caused by the Project. The Project has the potential to increase pedestrian activity to an existing unmarked crossing (e.g., across Universal Hollywood Drive at the Universal Hollywood Drive / Hilton Driveway intersection), but given the existing and sufficient pedestrian infrastructure available in the immediate Project Site vicinity, the increase in pedestrian activity across Universal Hollywood Drive is expected to be minimal, and would not result in a deficient condition. Based on this analysis, no Project-specific actions or improvements are recommended as it relates to pedestrian, bicycle, and transit access. It is noted that no roads within the direct vicinity of the Project Site (e.g., within one-quarter mile) have been identified within the HIN, the need for potential safety enhancement consistent with the City's Vision Zero initiative is not anticipated.

## 5.2 Project Access and Circulation Review

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

### 5.2.1 *Screening Criteria*

For land use projects, if the answer is yes to all of the following questions (refer to Section 3.3.2 of the TAG), further analysis will be required to assess whether the project would negatively affect project access and circulation:

- Does the land use project involve a discretionary action that would be under review by the Department of City Planning?
    - Yes, the Project will require a discretionary action that would be under review by the Department of City Planning.
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
    - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the VMT Calculator (Page 1 of *Appendix B*), the Project would generate 4,223 net new daily vehicle trips.

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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

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

### 5.2.2 *Evaluation Criteria*

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

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

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

- Would the project result in passenger loading demand that could not be accommodated within any proposed on-site passenger loading facility?
    - No, as discussed in Section 2.8, passenger loading associated with the Hotel's valet service will occur in the valet area on Level 1. Guests to the Hotel's existing conference center or Junior Ballroom will utilize a new valet station at Level 2 of the existing parking garage. The existing banquet entrance at the west façade of the Ancillary Hotel Building will become a rideshare (i.e., Uber/Lyft, airport shuttle) pick-up/drop-off location. While passenger loading and unloading will occur internal to the Project Site, some intermittent curbside loading/unloading may occur along the Project Site's frontage along Universal Hollywood Drive.
- Would accommodating the passenger loading demand create pedestrian or bicycle conflicts? Which curbside management options should be explored to better address passenger loading needs in the public right-of-way?
    - No, pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed by the Project Applicant, appropriate signage and pavement/curb markings will be

required by the City and installed by the Applicant. Any installations that fall within the City's (public) right-of-way will require prior review and approval by LADOT.

### 5.2.3 *Operational and Passenger Loading Evaluation Methodology*

Based on coordination with LADOT staff and as presented in the transportation assessment MOU, the following 11 study intersections were identified for operational evaluation of whether the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard:

1. US-101 Freeway Northbound Ramps / Campo de Cahuenga Way
2. MTA Driveway / Campo de Cahuenga Way
3. Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive
4. Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp
5. Lankershim Boulevard / Ventura Boulevard – Cahuenga Boulevard
6. US-101 Freeway Southbound Ramps – Regal Place / Cahuenga Boulevard
7. Universal Hollywood Drive / Hilton Driveway
8. Universal Studios Boulevard / W.C. Fields Drive
9. Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp
10. Universal Studios Boulevard / Cahuenga Boulevard West
11. Barham Boulevard / W. C. Fields Drive – Cahuenga Boulevard West

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

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

- Project Peak Hour Traffic Generation: Refer to Subsection 2.9.1
- Project Trip Distribution and Assignment: Refer to Subsection 2.9.2
- Existing Vehicle Network: Refer to Subsection 3.3
- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4

- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to Subsection 3.5

LADOT confirmed the appropriateness of the above data in the transportation assessment MOU it approved for the Project. The transportation assessment MOU is attached to this report in *Appendix A*.

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

(a) Existing (2020) conditions.

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2025 and with completion and occupancy of the related projects (i.e., future cumulative baseline)

(d) Condition (c) with completion and occupancy of the Project.

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

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–6* and *3–7*, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 4–1* and *4–2*, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in *Figures 4–3* and *4–4*, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 4–5* and *4–6*, respectively.

As presented in *Table 5–2*, the Project would not cause or substantially extend vehicle queuing at nine of the 11 study intersections during the weekday AM and PM peak hours. At these intersections, the change in queue length associated with the Project ranges from a slight decrease in queue length to a maximum of 60.7 feet (i.e., more than two vehicles). The Project

would result in unacceptable queuing and/or operational deficiencies at the following intersections:

- Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive
  - The change in queue length associated with the Project at the westbound Universal Hollywood Drive right-turn approach under Future Cumulative with Project conditions increases by 142.2 feet (i.e., less than six vehicles) during the weekday PM peak hour. It is noted that Universal Hollywood Drive is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Additionally, as this intersection is completely built out, no physical modifications or improvements to the public right-of-way are feasible.

- Universal Studios Boulevard / W.C. Fields Drive
  - The change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach under Future Cumulative with Project conditions increases by 206.8 feet (i.e., over eight vehicles) during the weekday PM peak hour. It is noted that W.C. Fields Drive is designated as a Local Street – Standard under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. However, a potential improvement has been identified. The improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. As presented in *Table 5–2*, with the proposed improvement, the change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach under Future Cumulative with Project conditions is reduced by 471.5 feet (i.e., just less than 19 vehicles) during the weekday PM peak hour.

- Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp
  - The change in queue length associated with the Project at the southbound Universal Studios Boulevard left-turn approach under Future Cumulative with Project conditions increases by 111.0 feet (i.e., over four vehicles) during the weekday PM peak hour. It is noted that Universal Studios Boulevard is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. However, a potential improvement has been identified. The improvement consists of updating the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. As presented in *Table 5–2*, with the proposed improvement, the change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach

under Future Cumulative with Project conditions is reduced by 575.2 feet (i.e., approximately 23 vehicles) during the weekday PM peak hour.

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

## 5.3 Project Construction Effect on Nearby Mobility

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

### 5.3.1 *Screening Criteria*

- Would a project that requires construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street)?

  - No. The Project Site does not have frontage along a roadway designated as a Boulevard or Avenue. Construction activities are not planned to require the closure of any vehicle travel lanes. The new construction associated with the Project will occur on the southerly portion of the Project Site, away from the public right of way.

- Would a project require construction activities to take place within the right-of-way of a Collector or Local Street (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and including overnight closures if on a residential street)?

  - No. The Project Site does not have frontage along a roadway designated as a Collector or Local Street. Construction activities are not planned to require the closure of any vehicle travel lanes. The new construction associated with the Project will occur on the southerly portion of the Project Site, away from the public right of way.

- Would in-street construction activities result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of existing bicycle parking to an existing land use for more than one day, including day and evening hours and overnight closures if access is lost to residential units?

- No. Construction activities are not planned to require the loss or regular vehicle, bicycle, or pedestrian access. The new construction associated with the Project will occur on the southerly portion of the Project Site, away from the public right of way.

- Would in-street construction activities result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours?

  - No.

- Would in-street construction activities result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus route that serves the project site?

  - No.

- Would construction activities result in the temporary removal and/or loss of on-street metered parking for more than 30 days?

  - No.

- Would the project involve a discretionary action to construct new building of more than 1,000 square feet that require access for hauling construction materials and equipment from streets of less than 24-feet wide in a hillside area?

  - No.

While the answer is "no" to all of the screening criteria questions, further analysis is not required to evaluate whether Project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation. However, an analysis has nonetheless conservatively been prepared to evaluate whether Project construction would negatively affect pedestrian, bicycle, transit, or vehicle circulation.

### 5.3.2 *Evaluation Criteria and Methodology*

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

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

- Temporary transportation constraints:
  - The length of time of temporary street closures or closures of two or more travel lanes;
  - The classification of the street (major arterial, state highway) affected;
  - The existing congestion levels on the affected street segments and intersections;
  - Whether the affected street directly leads to a freeway on- or off-ramp or other state highway;
  - Potential safety issues involved with street or lane closures; and
  - The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street.
- Temporary loss of access:
  - The length of time of any loss of pedestrian or bicycle circulation past a construction area;
  - The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area;
  - The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility;
  - The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access; and
  - The type of land uses affected, and related safety, convenience, and/or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines:
  - The length of time that an existing bus stop would be unavailable or that existing service would be interrupted;
  - The availability of a nearby location (within ¼ mile) to which the bus stop or route can be temporarily relocated;
  - The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes; and
  - Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s).

Descriptions of the Project location and physical setting are provided in Subsection 2.1, Project Site Location, and Section 3.0, Project Context, herein that apply to this analysis. The Project location and Project setting data items such as adjacent street classifications, public bicycle parking, inventory of existing transit lines, bus stops, etc. Per Section 3.4.4 of the TAG, the evaluation of the Project construction includes a review of whether construction activity within the street right-of-way would require any of the following:

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

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

As presented in *Table 5–3*, Project construction would not result in the closure of two or more travel lanes, would not require relocation of existing bus transit stops or routes, would not result in the loss of regular vehicle, bicycle, or pedestrian access, and would not impede emergency access.

### 5.3.3 *Recommended Project-Specific Action Items*

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

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

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

| CRITERIA | PROJECT RESPONSE | DESCRIPTION |
|---|---|---|
| ***TEMPORARY TRANSPORTATION CONSTRAINTS*** | | |
| The length of time of temporary street closures or closures of two or more travel lanes. | **N/A** | **Project construction will not require street closures or closures of two or more travel lanes.** |
| The classification of the street (major arterial, state highway) affected. | **Private Street; Private Drive** | **Universal Hollywood Drive is classified as a Private Street by the City of Los Angeles. Hotel Drive is a Private Drive located within the County of Los Angeles' Universal Studios Specific Plan area.** |
| The existing congestion levels on the affected street segments and intersections. | **Acceptable LOS** | |
| Whether the affected street directly leads to a freeway on- or off-ramp or other state highway. | **N/A** | **N/A** |
| Potential safety issues involved with street or lane closures. | **N/A** | **While safety issues are not anticipated, the Project Applicant will prepare a Construction Staging and Traffic Management Plan (CSTMP) which would detail any potential safety issues.** |
| The presence of emergency services (fire, hospital, etc.) located nearby that regularly use the affected street. | **None** | **N/A** |
| ***TEMPORARY LOSS OF ACCESS*** | | |
| The length of time of any loss of pedestrian or bicycle circulation past a construction area. | **Unknown** | **The Project Applicant will prepare a CSTMP which would detail any loss of pedestrian or bicycle circulation past the construction of the Project.** |
| The length of time of any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area. | **Unknown** | **The Project Applicant will prepare a CSTMP which would detail any loss of vehicular, bicycle, or pedestrian access to a parcel fronting the construction area.** |
| The length of time of any loss of ADA pedestrian access to a transit station, stop, or facility. | **None** | **N/A** |
| The availability of nearby vehicular or pedestrian access within ¼ mile of the lost access. | **None** | **N/A** |
| The type of land uses affected, and related safety, convenience, and/or economic issues. | **None** | **Access will be maintained for adjacent parcels in the Project vicinity.** |
| ***TEMPORARY LOSS OF BUS STOPS OR REROUTING OF BUS LINES*** | | |
| The length of time that an existing bus stop would be unavailable or that existing service would be interrupted. | **N/A** | **No relocations proposed.** |
| The availability of a nearby location (within one quarter-mile) to which the bus stop or route can be temporarily relocated. | **N/A** | **N/A** |
| The existence of other bus stops or routes with similar routes/destinations within a ¼-mile radius of the affected stops or routes. | **N/A** | **N/A** |
| Whether the interruption would occur on a weekday, weekend or holiday, and whether the existing bus route typically provides service that/those day(s). | **N/A** | **N/A** |

regarding any temporary transit stop relocations, and limitation of any potential roadway lane closure(s) to off-peak travel periods, to the extent feasible.

# 6.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** – The Project would improve and expand the Existing Hotel Building with the addition of the 20-story Hotel Expansion Building on the southern portion of the Project Site. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 square feet of quality restaurant floor area, and 10,000 square feet of spa floor area limited to guests and 250 non-guest members. Additionally, the Project would expand the north portion of the Ancillary Hotel Building to include 10,000 square feet of additional ancillary meeting space and 5,000 square feet of additional ancillary ballroom space. An additional 408 parking spaces would be added to the Project Site as part of the Project, for a total of 1,060 parking spaces on-site. Construction of the Project is proposed to be completed, and occupancy to occur, by the year 2025.

- ***Study Scope*** – This transportation assessment presents (i) a CEQA assessment of whether the Project conflicts or is inconsistent with local transportation-related plans and policies, (ii) a CEQA assessment of Project-related VMT, (iii) a CEQA assessment of whether the Project increases hazards due to a geometric design feature or incompatible use, (iv) a non-CEQA assessment of pedestrian, bicycle and transit access, (v) a non-CEQA evaluation of Project access, safety and circulation, and (vi) a non-CEQA review of Project construction activities. LADOT confirmed the appropriateness of the analysis criteria when it entered into a transportation assessment MOU for the Project.

- ***Project Trip Generation*** – The Project is expected to generate 148 vehicle trips (89 inbound trips and 59 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Project is expected to generate 246 vehicle trips (139 inbound trips and 107 outbound trips). The Project is expected to generate 3,711 daily vehicle trips.

- ***CEQA Analysis***

  - *Project Consistency with Local Plans and Policies:* The Project has been found to be consistent with the relevant City transportation plans, programs, ordinances, or policies, and does not include any features that would preclude the City from completing and complying with these guiding documents and policy objectives. Therefore, a determination of less than significant can be made for the Project with respect to consistency with transportation plans, programs, ordinances, or policies. Furthermore, the Project Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance) and the other requirements pursuant to the LAMC.

  - *VMT Analysis:* The Project, with the inclusion of four TDM strategies as Project Design Features outlined in Section 2.10, will not result in a significant VMT impact. Furthermore, based on those TDM strategies, as well as the Project-related VMT analysis and the conclusions discussed in Section 4.2.3 (which demonstrate that the Project falls under the City's efficiency-based impact thresholds and thus are already

shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulatively significant VMT impacts are anticipated.

- *Geometric Design Review:* Given that the Project would not involve any modification of the current access point to the Project Site from the public right-of-way, and based on a review of the forecast net new weekday AM and PM peak hour Project traffic volumes (i.e., those traffic volumes are summarized in Section 2.9 herein), the existing physical condition of the Project Site, and potential off-site pedestrian enhancements, no safety concerns related to geometric design are noted. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, resulting in a less than significant impact determination.

- *Freeway Safety Analysis:* While the Project will add more than 25 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project conditions increases by 25.9 feet (i.e., just over one vehicle) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. As the change in queue length at the US-101 Freeway Southbound Off-Ramp right-turn approach would less than the City's threshold of two vehicles, the Project would cause a less than significant freeway safety impact.

- ***Non-CEQA Analysis***

  - *Pedestrian, Bicycle, and Transit Access:* It is determined the Project does not include any features that would permanently remove, adversely modify, or degrade pedestrian, bicycle, and transit facilities in the Project vicinity. As noted herein, it is determined that it is possible that the Project may intensify use of pedestrian, bicycle, and transit facilities in the Project vicinity, however, such use is not expected to result in a deficient condition caused by the Project.

  - *Project Access and Circulation Review:* The Project's weekday AM and PM peak hour traffic volumes would not cause or substantially extend vehicle queuing at nine of the 11 study intersections analyzed (as discussed in Section 5.2.3 herein). Physical improvements and modifications to existing traffic signal timing plans at these intersections have been identified and are shown to improve traffic operation at these intersections. Additionally, the addition of Project traffic to nearby freeway off-ramps would not result in a significant freeway safety impact.

  - *Project Construction Effect on Nearby Mobility:* The analysis herein concludes the Project would not result in the closure of two or more travel lanes, would not relocate existing bus transit stops or routes, and would not impede emergency access. However, it is recommended that a construction work site traffic control plan be

submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of construction activity should any lane closure(s) be proposed. Consistent with LADOT's recommendation and requirements, the Project Applicant would also prepare a detailed CSTMP, which includes any applicable street/lane/sidewalk closure information, a detour plan, haul route(s), and a staging plan.

# APPENDIX A

## APPROVED TRANSPORTATION ASSESSMENT MEMORANDUM OF UNDERSTANDING

LADOT

# 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: Hilton Universal City

Project Address: 555 Universal Hollywood Drive

Project Description: Development of 395 hotel guest rooms and ancillary facilities (15,000 square feet of meeting room space, 5,000 square feet of ballroom use), 12,000 square feet of quality restaurant space, and 10,000 square feet of spa floor area (for 250 non-hotel guests).

LADOT Project Case Number: CEN18-46906 Project Site Plan attached? *(Required)* ☒ Yes ☐ No

## II. TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

Provide any transportation demand management measures that are being considered where the eligibility needs to be verified in advance (e.g. bike share kiosks, unbundled parking, microstransit service, etc.). Note that LADOT staff will make the final determination of the TDM measure's eligibility for a particular project. Please confirm eligibility with LADOT staff assigned to your project.

1 Transit Subsidies (Project Design Feature)

2 Promotions and Marketing (Project Design Feature)

3 Include Bike Parking per LAMC (Project Design Feature)

4 Include Secure Bike Parking and Showers (Project Design Feature)

Select any TDM measures that are currently being considered that may be eligible as a Project Design Feature[1]:

| | |
|---|---|
| | Reduced Parking Supply[2] |
| x | Bicycle Parking and Amenities |
| | Parking Cash Out |

## III. TRIP GENERATION

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

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

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)* ☒ Yes ☐ No

| | IN | OUT | TOTAL |
|---|---|---|---|
| AM Trips | 89 | 59 | 148 |
| PM Trips | 139 | 107 | 246 |

NET Daily Vehicle Trips (DVT)

3,177 DVT (ITE 10th ed.)

4,223 DVT (VMT Calculator ver. 1.3

[1] 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.

[2] 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 a the City/s Transit Oriented ted Community Guidelines.

## IV. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2025 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. US-101 Freeway NB Ramps / Campo de Cahuenga Way
2. MTA Driveway / Campo de Cahuenga Way
3. Lankershim Boulevard / Campo de Cahuenga Way-Universal Hollywood Drive
4. Lankershim Boulevard / US-101 Freeway NB Off-Ramp
5. Lankershim Boulevard / Ventura Boulevard- Cahuenga Boulevard
6. US-101 Freeway SB Ramps - Regal Place / Cahuenga Boulevard
7. Universal Hollywood Drive / Hilton Driveway
8. Universal Studios Boulevard / W.C. Fields Drive
9. Universal Studios Boulevard / US-101 Freeway SB On-Ramp
10. Universal Studios Boulevard / Cahuenga Boulevard West
11. Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East

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

## 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

If questions a., b., or c. is Yes then complete **Attachment C.1: Access Assessment Criteria**.

## VI. SITE PLAN AND MAP OF STUDY AREA

| Does the attached site plan 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 | ☒ | ☐ | ☐ |
| Project driveways (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) | ☐ | ☐ | ☒ |

## VII. CONTACT INFORMATION

| | CONSULTANT | DEVELOPER |
|---|---|---|
| Name: | Linscott, Law & Greenspan, Engineers | Mark Davis, General Manager |
| Address: | 20931 Burbank Boulevard, Suite C, Woodland Hills, CA 91367 | 555 Universal Hollywood Drive, Universal City, CA 91608 |
| Phone Number: | (818) 835-8648 | (818) 509-2013 |
| E-Mail: | jshender@llgengineers.com | mdavis@universalhilton.com |

Approved by: x _____ 9/23/2020 x _____ 10/14/2020

Consultant's Representative | Date | LADOT 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.




N

NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ STUDY INTERSECTION

# FIGURE 1-1
# VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

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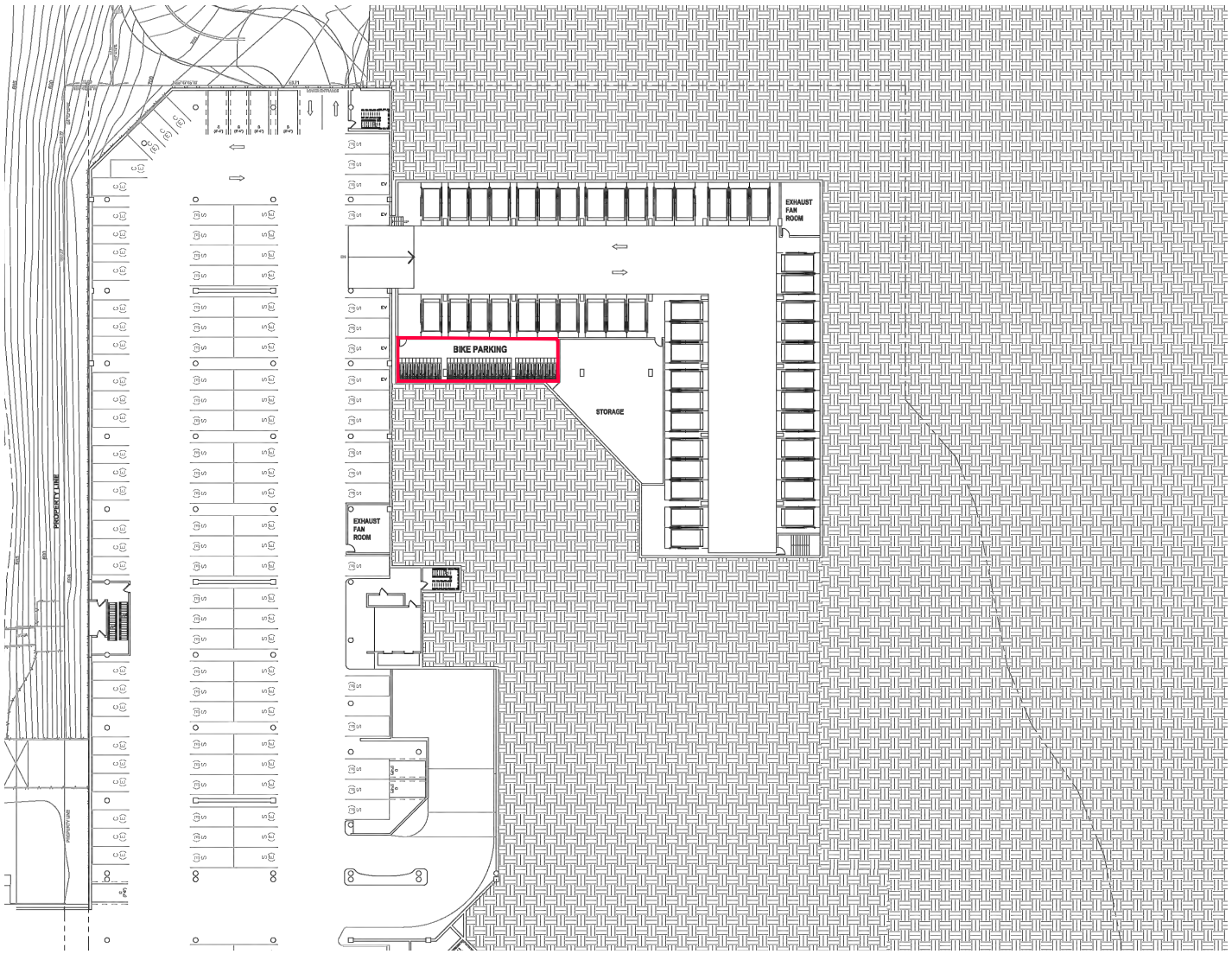
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SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT




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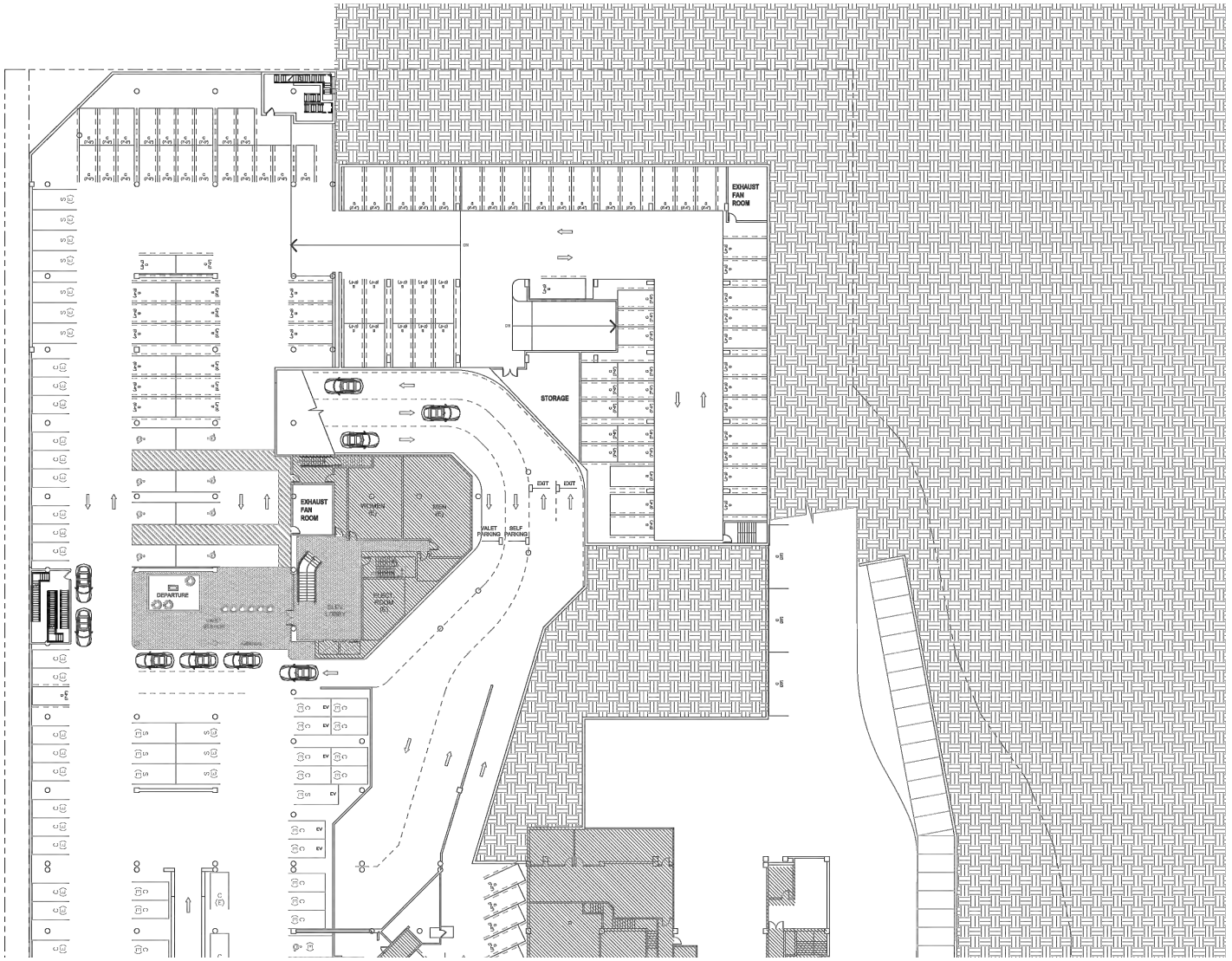
SOURCE: LARGE ARCHITECTURE
ONSITE □ICYCLE PAR□ING

# FIGURE 2-□
# PROJECT SITE PLAN
## ONSITE □ICYCLE PAR□ING □LEVEL □2 - NORTH□

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

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SOURCE: LARGE ARCHITECTURE

NOT TO SCALE

# FIGURE 2-□
# PROJECT SITE PLAN
## □ROP-OFF□PIC□-UP AREA □LEVEL □ - NORTH□

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HILTON UNIVERSAL CITY PROJECT

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Table 2-1
PROJECT TRIP GENERATION [1]

22-Sep-20

| LAND USE | SIZE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] IN | AM PEAK HOUR VOLUMES [2] OUT | AM PEAK HOUR VOLUMES [2] TOTAL | PM PEAK HOUR VOLUMES [2] IN | PM PEAK HOUR VOLUMES [2] OUT | PM PEAK HOUR VOLUMES [2] TOTAL |
|---|---|---|---|---|---|---|---|---|
| ***Proposed Project*** | | | | | | | | |
| Hotel [3] | 395 Rooms | 3,302 | 110 | 76 | 186 | 121 | 116 | 237 |
| Restaurant [4] | 12,000 GSF | 1,006 | 7 | 2 | 9 | 63 | 31 | 94 |
| Spa [5] | 10,000 GSF | 329 | 7 | 6 | 13 | 20 | 15 | 35 |
| **Subtotal** | | 4,637 | 124 | 84 | 208 | 204 | 162 | 366 |
| ***Transit/Walk-In Trips [6]*** | | | | | | | | |
| Hotel (25%) | | (826) | (28) | (19) | (47) | (30) | (29) | (59) |
| Restaurant (25%) | | (252) | (2) | (1) | (3) | (16) | (8) | (24) |
| Spa (25%) | | (82) | (2) | (2) | (4) | (5) | (4) | (9) |
| **Subtotal** | | (1,160) | (32) | (22) | (54) | (51) | (41) | (92) |
| ***Internal Capture*** | | | | | | | | |
| Restaurant [7] (15%) | | (113) | (1) | 0 | (1) | (7) | (3) | (10) |
| Spa [7] (15%) | | (37) | (1) | (1) | (2) | (2) | (2) | (4) |
| Hotel [8] | | (150) | (1) | (2) | (5) | (5) | (9) | (11) |
| **Subtotal** | | (300) | (3) | (3) | (6) | (14) | (14) | (14) |
| **NET INCREASE** | | **3,177** | **89** | **59** | **148** | **139** | **107** | **246** |

[1] Source: ITE *Trip Generation Manual,* 10th Edition, 2017.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 310 (Hotel) trip generation average rates.
- Daily Trip Rate: 8.36 trips/room; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.47 trips/room; 59% inbound/41% outbound
- PM Peak Hour Trip Rate: 0.60 trips/room; 51% inbound/49% outbound

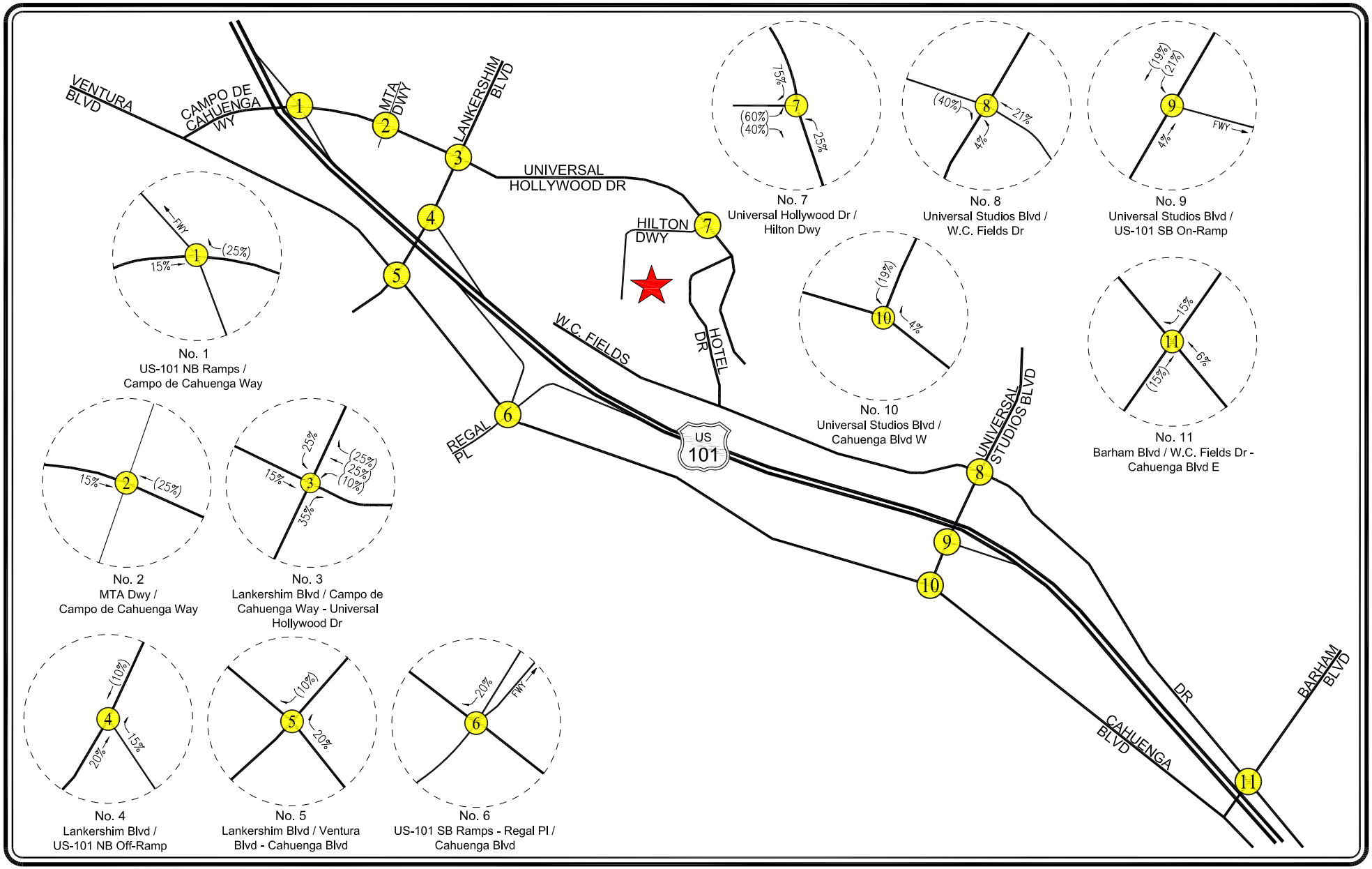
[4] ITE Land Use Code 931 (Quality Restaurant) trip generation average rates.
- Daily Trip Rate: 83.84 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.73 trips/1,000 SF of floor area; assume 80% inbound/20% outbound
- PM Peak Hour Trip Rate: 7.80 trips/1,000 SF of floor area; 67% inbound/33% outbound

[5] ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates.
- Daily Trip Rate: No average trip rates available.
- AM Peak Hour Trip Rate: 1.31 trips/1,000 SF of floor area; 51% inbound/49% outbound
- PM Peak Hour Trip Rate: 3.45 trips/1,000 SF of floor area; 57% inbound/43% outbound

[6] The transit reduction is based on the site's proximity to the Metro Red Line rail station and has been applied to the all components of the Project based on the *LADOT Transportation Assessment Guidelines*, July 2020. The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding uses (i.e., Universal Studios Hollywood, Universal City Walk).

[7] The internal capture reduction for the restaurant and spa uses is based on the synergy between the hotel and the restaurant and spa uses provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.

[8] For each internal capture trip related to the restaurant and spa uses, a corresponding internal capture trip reduction is assumed for the hotel use.




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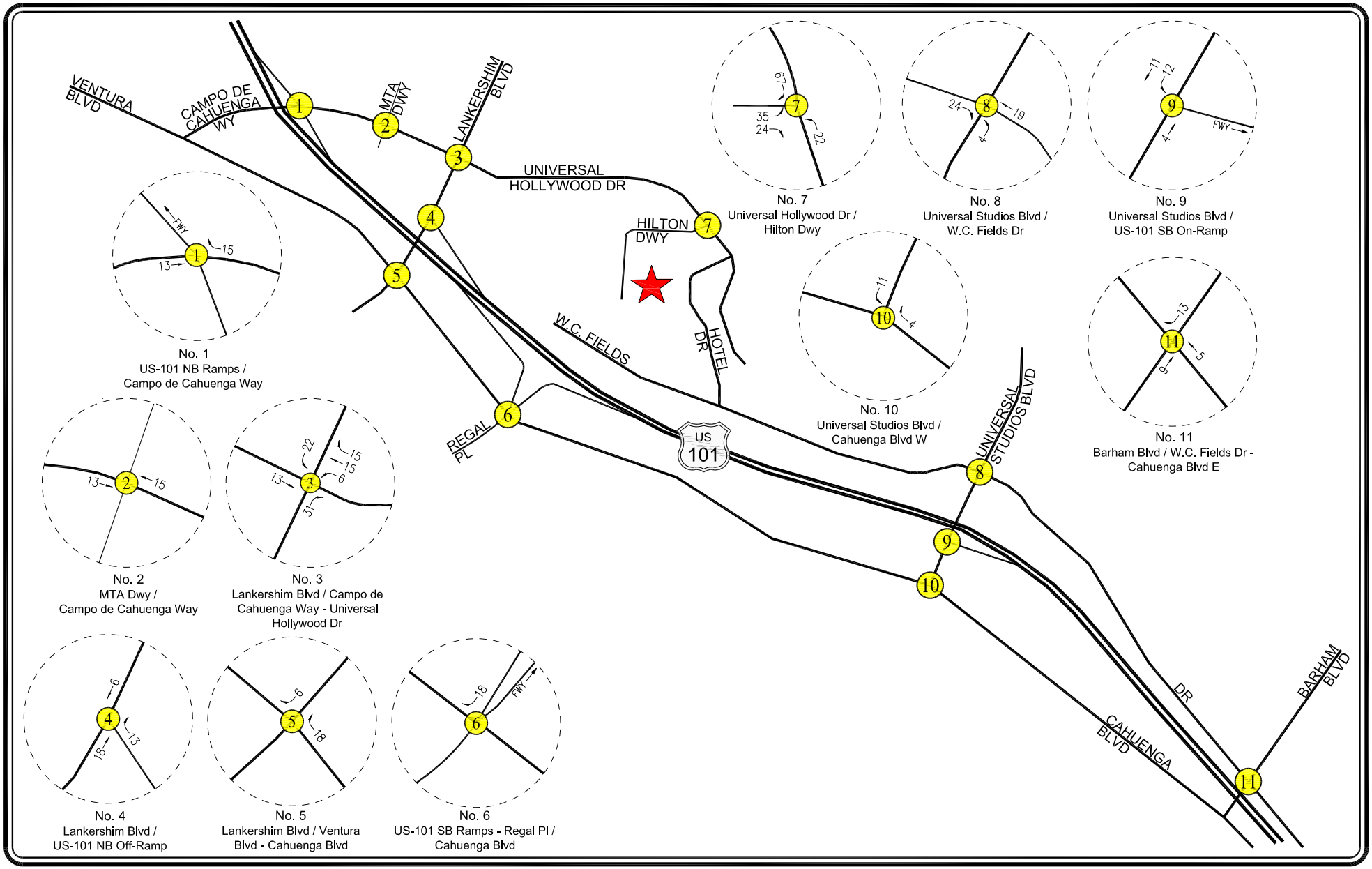
★ PROJECT SITE
Ⓧ STUDY INTERSECTION
## = INBOUND PERCENTAGES
(##) = OUTBOUND PERCENTAGES

# FIGURE 2-5
# PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

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★ PROJECT SITE

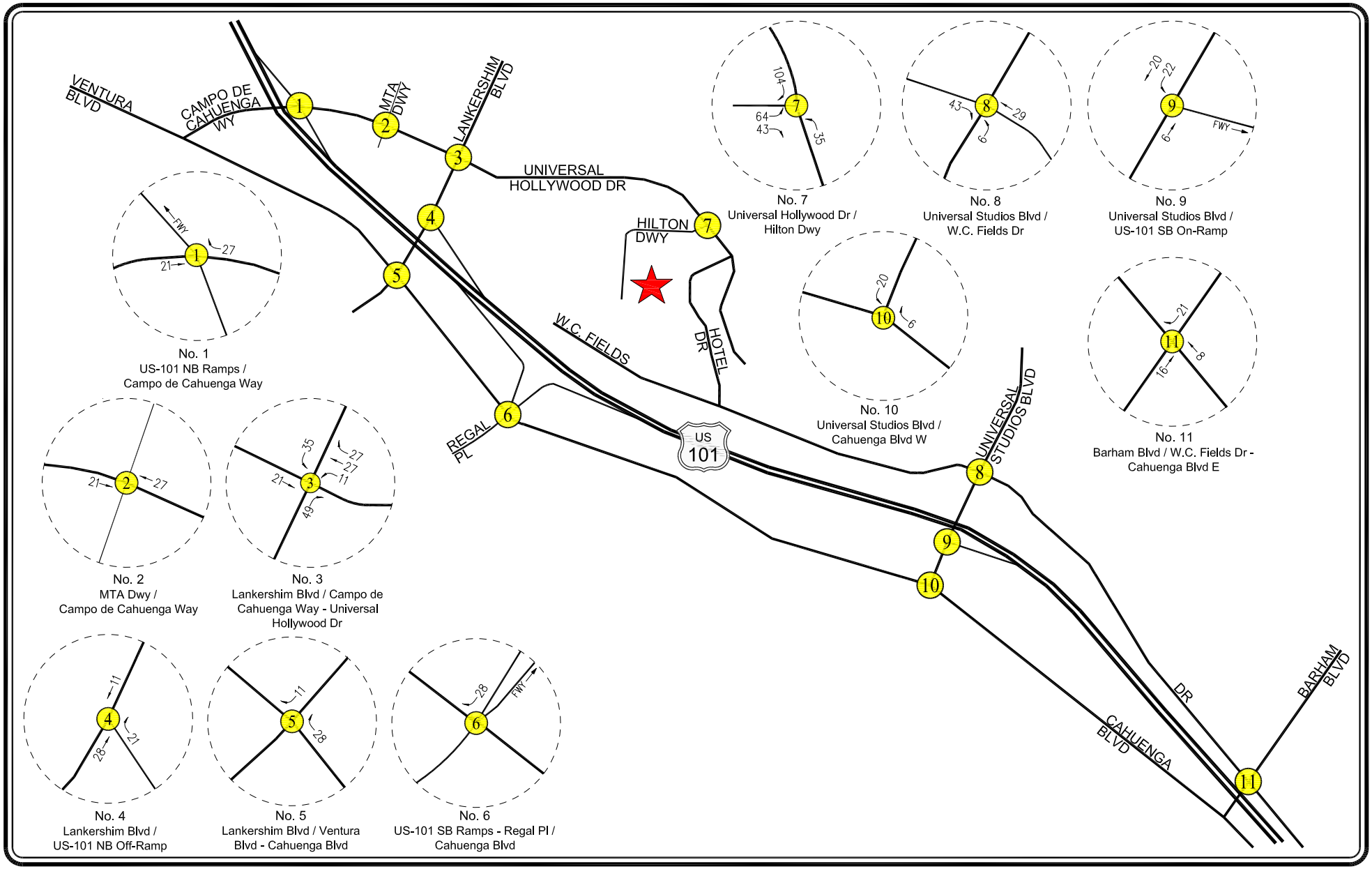
Ⓧ STUDY INTERSECTION

# FIGURE 2-6
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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PROJECT SITE
STUDY INTERSECTION

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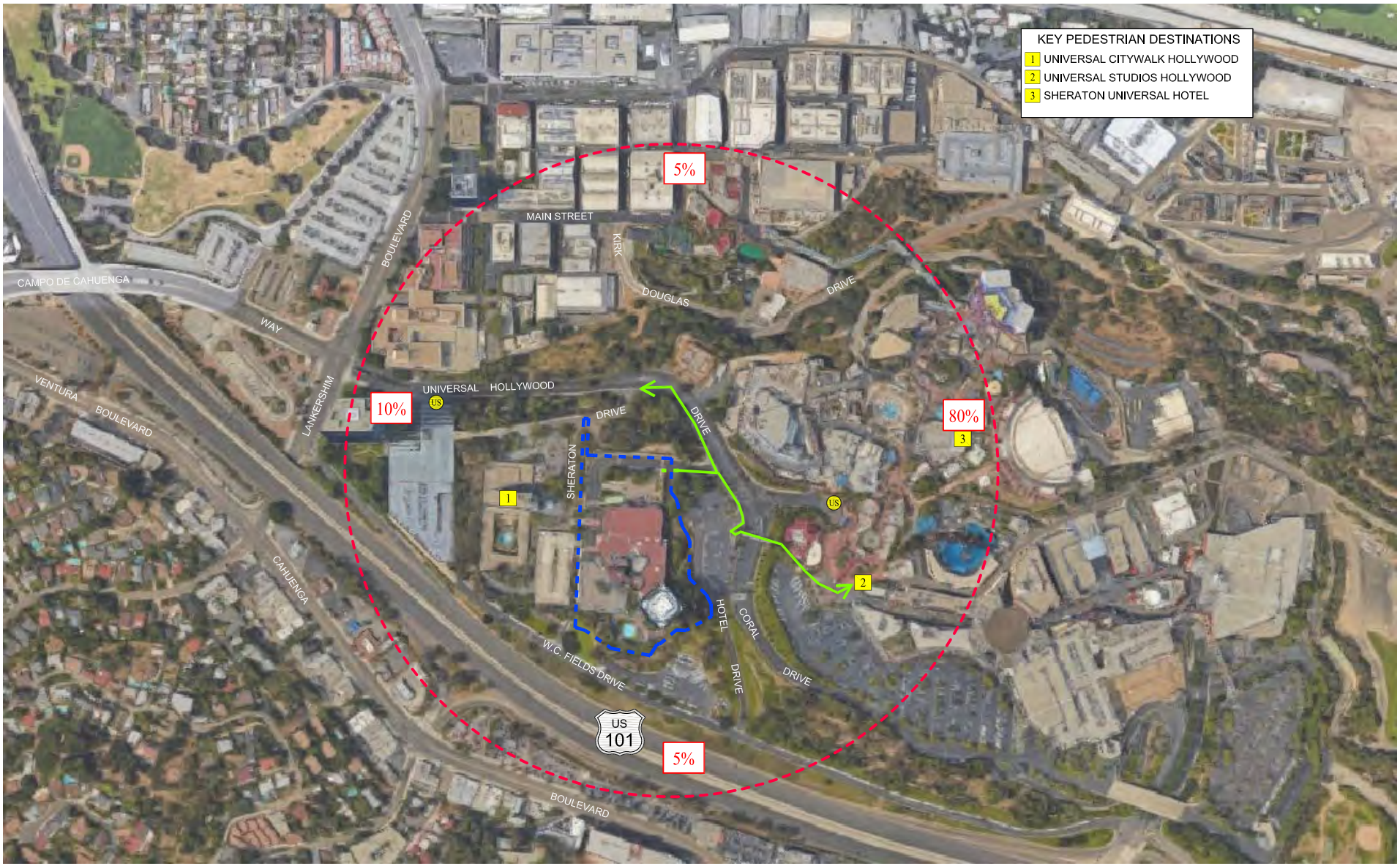
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# FIGURE 2-7
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

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MAP SOURCE: GOOGLE MAPS
PROJECT SITE
QUARTER-MILE RADIUS
PEDESTRIAN ENTRANCE
PEDESTRIAN ROUTES TO KEY DESTINATIONS
XX% GEOGRAPHIC DISTRIBUTION

US UNIVERSAL STUDIOS SHUTTLE BUS STOP

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# FIGURE 3-1
# PEDESTRIAN ATTRACTORS INVENTORY

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

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

23-Jul-20

| MAP NO. | PROJECT NAME/ PROJECT NUMBER | PROJECT STATUS | ADDRESS/ LOCATION | LAND USE DATA | | PROJECT DATA SOURCE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LAND-USE | SIZE | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| 1 | NBC Universal Evolution Plan | Approved | 555 E. Universal Hollywood Drive | Studio<br>Studio Office<br>Office<br>Entertainment<br>Entertainment Retail<br>Amphitheater<br>Hotel | 307,949 GSF<br>647,320 GSF<br>470,247 GSF<br>177,447 GSF<br>39,216 GLSF<br>(50,600) GSF<br>900,000 GSF | [3] | 19,139 | 1,271 | 489 | 1,760 | 307 | 1,391 | 1,698 |
| 2 | Cohen Apartments | Approved | 10601-10623 Riverside Drive | Apartments<br>Retail | 68 DU<br>12,451 GSF | | 1,083 | 17 | 39 | 56 | 47 | 36 | 83 |
| 3 | 11036 W. Moorpark Street Apartments Project | Under Construction | 11036 W. Moorpark Street | Apartments<br>Single-Family Homes | 96 DU<br>(8) DU | | 506 | 7 | 32 | 39 | 31 | 16 | 47 |
| 4 | 4215 Vineland Avenue Condominiums Project | Approved | 4215 Vineland Avenue | Condominiums<br>Apartments<br>Single-Family Homes | 85 DU<br>(32) DU<br>(1) DU | [4] | 271 | 3 | 17 | 20 | 15 | 8 | 23 |
| 5 | Lankershim/Riverside Mixed-Use Project | Approved | 10850 Riverside Drive | Apartments<br>Retail | 179 DU<br>5,684 GLSF | [5] | 1,336 | 21 | 62 | 83 | 69 | 44 | 113 |
| 6 | 3077 Cahuenga Boulevard Studio Apartments Project | Proposed | 3077 Cahuenga Boulevard | Apartments | 179 DU | | 299 | 5 | 18 | 23 | 10 | 18 | 28 |
| 7 | Gas Station with Convenience Store and Car Wash | Proposed | 4377 N. Vineland Avenue | Convenience Store<br>Car Wash | 2,555 GSF<br>1,100 GSF | | 645 | 21 | 22 | 43 | 20 | 21 | 41 |
| **TOTAL** | | | | | | | 23,279 | 1,345 | 679 | 2,024 | 499 | 1,534 | 2,033 |

[1] Source: City of Los Angeles Department of Transportation Related Projects List.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: NBC Universal Evolution Plan Environmental Impact Report Alternative 10, August 2012.
[4] Source: Technical Memorandum for the 4215 Vineland Condominiums Project, prepared by Linscott, Law & Greenspan, Engineers, April 19, 2016.
[5] Source: Technical Memorandum for the Lankershim/Riverside Mixed-Use Project, prepared by Linscott, Law & Greenspan, Engineers, September 17, 2018.

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

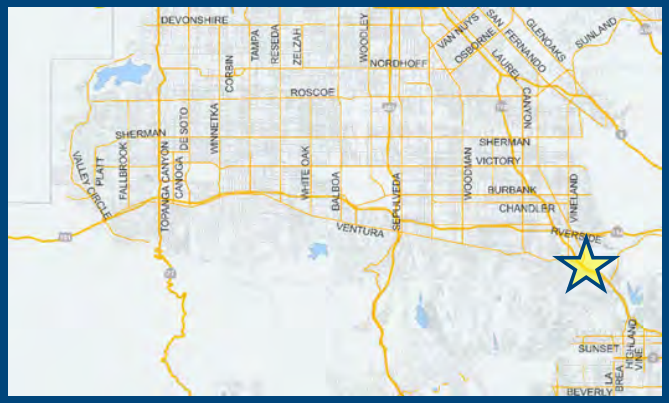
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Quality Restaurant | 12 | ksf |
| Retail \| Health Club | 10 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

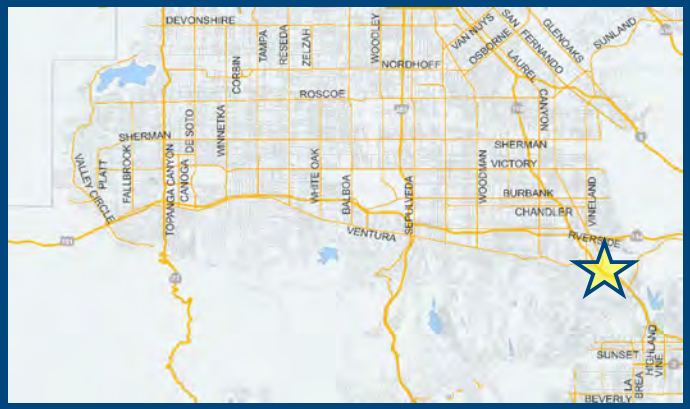
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Quality Restaurant | 12 | ksf |
| Retail \| Health Club | 10 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**

☐ Proposed Prj ☐ Mitigation

100 city code parking provision for the project site

74 actual parking provision for the project site

**Unbundle Parking**

☐ Proposed Prj ☐ Mitigation

175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**

☐ Proposed Prj ☐ Mitigation

50 percent of employees eligible

**Price Workplace Parking**

☐ Proposed Prj ☐ Mitigation

6.00 daily parking charge (dollar)

50 percent of employees subject to priced parking

**Residential Area Parking Permits**

☐ Proposed Prj ☐ Mitigation

200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **3,711** Daily Vehicle Trips | **3,711** Daily Vehicle Trips |
| **25,732** Daily VMT | **25,732** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **8.7** Work VMT per Employee | **8.7** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

7/15/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **3,711** | **Daily Vehicle Trips** | **3,711** | **Daily Vehicle Trips** |
| **25,732** | **Daily VMT** | **25,732** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **8.7** | **Work VMT per Employee** | **8.7** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Transit** | *Reduce transit headways* | *Reduction in headways (increase in frequency) (%)* | *0%* | *0%* |
| | | *Existing transit mode share (as a percent of total daily trips) (%)* | *0%* | *0%* |
| | | *Lines within project site improved (<50%, >=50%)* | *0* | *0* |
| | *Implement neighborhood shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees and residents eligible (%)* | *0%* | *0%* |
| | Transit subsidies | Employees and residents eligible (%) | 100% | 100% |
| | | Amount of transit subsidy per passenger (daily equivalent) ($) | $1.49 | $1.49 |
| **Education & Encouragement** | *Voluntary travel behavior change program* | *Employees and residents participating (%)* | *0%* | *0%* |
| | Promotions and marketing | Employees and residents participating (%) | 100% | 100% |

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Parking** | Reduce parking supply | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Parking sections 1 - 5 |
| | Unbundle parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Parking cash-out | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Price workplace parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Residential area parking permits | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| **Transit** | Reduce transit headways | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Transit sections 1 - 3 |
| | Implement neighborhood shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Transit subsidies | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | |
| **Education & Encouragement** | Voluntary travel behavior change program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Education & Encouragement sections 1 - 2 |
| | Promotions and marketing | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 0% | |
| **Commute Trip Reductions** | Required commute trip reduction program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4 |
| | Alternative Work Schedules and Telecommute Program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Employer sponsored vanpool or shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Ride-share program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| **Shared Mobility** | Car-share | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | TDM Strategy Appendix, Shared Mobility sections 1 - 3 |
| | 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% | |
| | 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**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Bicycle Infrastructure** | Implement/ Improve on-street bicycle facility | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3 |
| | Include Bike parking per LAMC | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | Include secure bike parking and showers | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| **Neighborhood Enhancement** | Traffic calming improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2 |
| | Pedestrian network improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | |

## Final Combined & Maximum TDM Effect

| | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated |
| **COMBINED TOTAL** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *8%* |
| **MAX. TDM EFFECT** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* |

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Home Based Other Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Non-Home Based Other Production | -12.1% | 521 | 4,482 | -12.1% | 521 | 4,482 |
| Home-Based Work Attraction | -12.1% | 275 | 2,228 | -12.1% | 275 | 2,228 |
| Home-Based Other Attraction | -12.1% | 2,394 | 15,322 | -12.1% | 2,394 | 15,322 |
| Non-Home Based Other Attraction | -12.1% | 521 | 3,700 | -12.1% | 521 | 3,700 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,228** | **2,228** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **8.7** | **8.7** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| | |
|---|---|
| You, the User | |
| By: |  |
| Print Name: | Jason Shender |
| Title: | Transportation Planner II |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 20931 Burbank Boulevard, Suite C<br>Woodland Hills, CA 91367 |
| Phone: | (818) 835-8648 |
| Email Address: | jshender@llgengineers.com |
| Date: | 7/15/2020 |

# APPENDIX B

## LADOT VMT CALCULATOR OUTPUT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

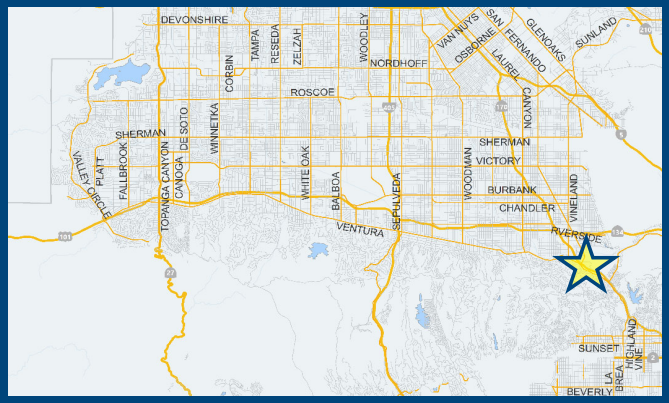
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Quality Restaurant | 12 | ksf |
| Retail \| Health Club | 10 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

7/15/2020

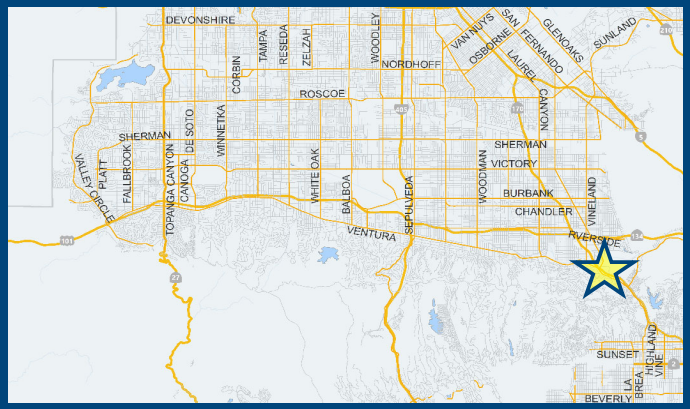
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Quality Restaurant | 12 | ksf |
| Retail \| Health Club | 10 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply** ☐ Proposed Prj ☐ Mitigation
- 100 city code parking provision for the project site
- 74 actual parking provision for the project site

**Unbundle Parking** ☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

**Parking Cash-Out** ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

**Price Workplace Parking** ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

**Residential Area Parking Permits** ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **3,711** Daily Vehicle Trips | **3,711** Daily Vehicle Trips |
| **25,732** Daily VMT | **25,732** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **8.7** Work VMT per Employee | **8.7** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

7/15/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **3,711** | **Daily Vehicle Trips** | **3,711** | **Daily Vehicle Trips** |
| **25,732** | **Daily VMT** | **25,732** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **8.7** | **Work VMT per Employee** | **8.7** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Transit** | *Reduce transit headways* | *Reduction in headways (increase in frequency) (%)* | *0%* | *0%* |
| | | *Existing transit mode share (as a percent of total daily trips) (%)* | *0%* | *0%* |
| | | *Lines within project site improved (<50%, >=50%)* | *0* | *0* |
| | *Implement neighborhood shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees and residents eligible (%)* | *0%* | *0%* |
| | Transit subsidies | Employees and residents eligible (%) | 100% | 100% |
| | | Amount of transit subsidy per passenger (daily equivalent) ($) | $1.49 | $1.49 |
| **Education & Encouragement** | *Voluntary travel behavior change program* | *Employees and residents participating (%)* | *0%* | *0%* |
| | Promotions and marketing | Employees and residents participating (%) | 100% | 100% |

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Parking** | Reduce parking supply | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Parking sections 1 - 5 |
| | Unbundle parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Parking cash-out | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Price workplace parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Residential area parking permits | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| **Transit** | Reduce transit headways | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Transit sections 1 - 3 |
| | Implement neighborhood shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Transit subsidies | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | |
| **Education & Encouragement** | Voluntary travel behavior change program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Education & Encouragement sections 1 - 2 |
| | Promotions and marketing | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 0% | |
| **Commute Trip Reductions** | Required commute trip reduction program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4 |
| | Alternative Work Schedules and Telecommute Program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Employer sponsored vanpool or shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Ride-share program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| **Shared Mobility** | Car-share | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | TDM Strategy Appendix, Shared Mobility sections 1 - 3 |
| | 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% | |
| | 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**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Bicycle Infrastructure** | Implement/ Improve on-street bicycle facility | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3 |
| | Include Bike parking per LAMC | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | Include secure bike parking and showers | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| **Neighborhood Enhancement** | Traffic calming improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2 |
| | Pedestrian network improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | |

## Final Combined & Maximum TDM Effect

| | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated |
| **COMBINED TOTAL** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *8%* |
| **MAX. TDM EFFECT** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* |

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: July 15, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Home Based Other Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Non-Home Based Other Production | -12.1% | 521 | 4,482 | -12.1% | 521 | 4,482 |
| Home-Based Work Attraction | -12.1% | 275 | 2,228 | -12.1% | 275 | 2,228 |
| Home-Based Other Attraction | -12.1% | 2,394 | 15,322 | -12.1% | 2,394 | 15,322 |
| Non-Home Based Other Attraction | -12.1% | 521 | 3,700 | -12.1% | 521 | 3,700 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,228** | **2,228** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **8.7** | **8.7** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| | |
|---|---|
| You, the User | |
| By: |  |
| Print Name: | Jason Shender |
| Title: | Transportation Planner II |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 20931 Burbank Boulevard, Suite C<br>Woodland Hills, CA 91367 |
| Phone: | (818) 835-8648 |
| Email Address: | jshender@llgengineers.com |
| Date: | 7/15/2020 |

# APPENDIX C

## MANUAL TRAFFIC COUNT DATA

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** US-101 Freeway NB Ramps

**East/West** Campo de Cahuenga

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 30 | 0 | 29 | 25 |
| **BIKES** | 0 | 0 | 9 | 16 |
| **BUSES** | 0 | 0 | 55 | 53 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 143 | 9.15 | 0 | 0.00 | 186 | 8.45 | 78 | 9.45 |
| *PM PK 15 MIN* | 98 | 15.00 | 0 | 0.00 | 134 | 16.00 | 293 | 17.45 |
| *AM PK HOUR* | 517 | 7.45 | 0 | 0.00 | 691 | 8.30 | 261 | 9.00 |
| *PM PK HOUR* | 340 | 15.00 | 0 | 0.00 | 505 | 17.00 | 1095 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 379 | 2 | 0 | 381 |
| *8-9* | 467 | 9 | 3 | 479 |
| *9-10* | 493 | 9 | 6 | 508 |
| *15-16* | 312 | 23 | 5 | 340 |
| *16-17* | 266 | 25 | 1 | 292 |
| *17-18* | 299 | 27 | 1 | 327 |
| TOTAL | 2216 | 95 | 16 | 2327 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 0 | 0 | 0 |
| *8-9* | 0 | 0 | 0 | 0 |
| *9-10* | 0 | 0 | 0 | 0 |
| *15-16* | 0 | 0 | 0 | 0 |
| *16-17* | 0 | 0 | 0 | 0 |
| *17-18* | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 381 | 10 | 0 | 28 | 1 |
| 479 | 13 | 0 | 52 | 3 |
| 508 | 12 | 0 | 49 | 9 |
| 340 | 8 | 0 | 17 | 0 |
| 292 | 7 | 0 | 45 | 0 |
| 327 | 10 | 0 | 71 | 3 |
| 2327 | 60 | 0 | 262 | 16 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 87 | 303 | 0 | 390 |
| *8-9* | 95 | 561 | 0 | 656 |
| *9-10* | 92 | 517 | 0 | 609 |
| *15-16* | 226 | 173 | 0 | 399 |
| *16-17* | 290 | 176 | 0 | 466 |
| *17-18* | 301 | 204 | 0 | 505 |
| TOTAL | 1091 | 1934 | 0 | 3025 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 114 | 102 | 216 |
| *8-9* | 0 | 123 | 109 | 232 |
| *9-10* | 0 | 131 | 130 | 261 |
| *15-16* | 0 | 138 | 415 | 553 |
| *16-17* | 0 | 190 | 612 | 802 |
| *17-18* | 0 | 277 | 818 | 1095 |
| TOTAL | 0 | 973 | 2186 | 3159 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 606 | 0 | 0 | 0 | 0 |
| 888 | 0 | 0 | 0 | 0 |
| 870 | 0 | 0 | 2 | 0 |
| 952 | 0 | 0 | 0 | 0 |
| 1268 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 1 | 0 |
| 6184 | 0 | 0 | 3 | 0 |

Prepared by National Data & Surveying Services

# US-101 Freeway NB Ramps & Campo de Cahuenga

## Peak Hour Turning Movement Count

**ID:** 18-05609-020
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 08:30 AM - 09:30 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

**CONTROL:** Signalized

| | AM | NOON | PM |
|---|---|---|---|
| TEV | 1396 | 0 | 1927 |
| PHF | 0.89 | | 0.96 |

### SOUTHBOUND — US-101 Freeway NB Ramps

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 0 | 0 | 0 | 0 | 207 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 0 | 0 | 0 | 0 | 1146 | PM |

### EASTBOUND — Campo de Cahuenga

| AM | NOON | PM | |
|---|---|---|---|
| 576 | 0 | 576 | ⇦ |
| 0 | 0 | 0 | 0 ↶ |
| 85 | 0 | 301 | 1 ↱ |
| 606 | 0 | 204 | 3 → |
| 0 | 0 | 0 | 0 ↷ |

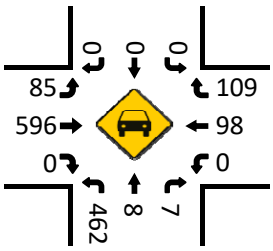
### WESTBOUND — Campo de Cahuenga

| | PM | NOON | AM |
|---|---|---|---|
| 2 ↰ | 818 | 0 | 113 |
| 2 ← | 277 | 0 | 108 |
| 0 ↶ | 0 | 0 | 0 |
| 0 ↷ | 0 | 0 | 0 |
| ⇨ | 205 | 0 | 613 |

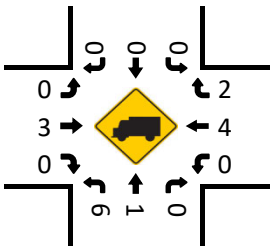
### NORTHBOUND — US-101 Freeway NB Ramps

| | | | | | | |
|---|---|---|---|---|---|---|
| PM | 0 | 0 | 299 | 27 | 1 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 0 | 0 | 468 | 9 | 7 | AM |
| ⇩ | 0 ↶ | 1.5 ↰ | 0.5 ↑ | 0 ↱ | | |

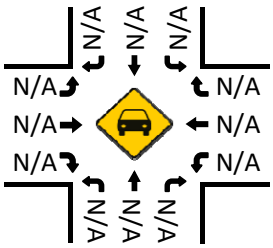
### Cars (AM)



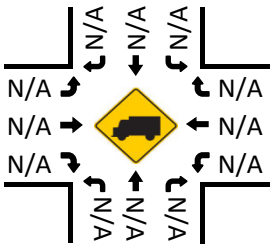

### HT (AM)



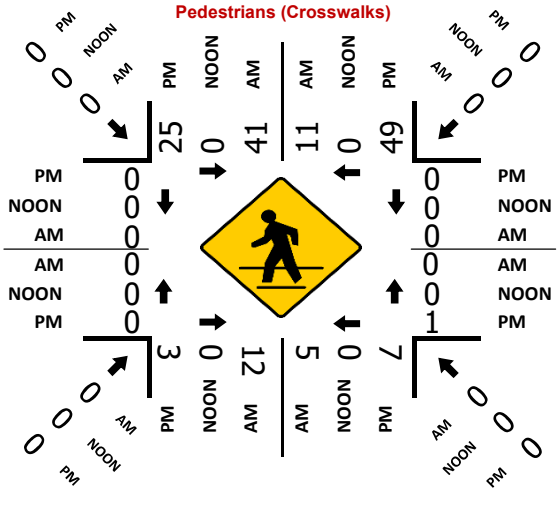

### Cars (NOON)



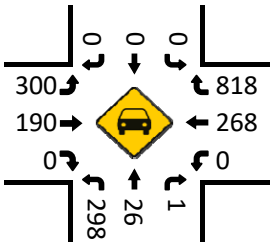

### HT (NOON)



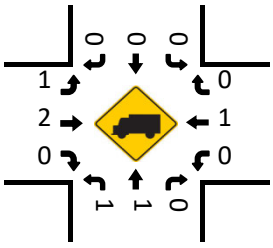

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** US-101 Freeway NB Ramps & Campo de Cahuenga
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-020
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | US-101 Freeway NB Ramps | | | | US-101 Freeway NB Ramps | | | | Campo de Cahuenga | | | | Campo de Cahuenga | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1.5 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 2 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 44 | 0 | 0 | 0 | 24 | 21 | 0 | 179 |
| 7:15 AM | 113 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 61 | 0 | 0 | 0 | 22 | 27 | 0 | 250 |
| 7:30 AM | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 75 | 0 | 0 | 0 | 37 | 29 | 0 | 242 |
| 7:45 AM | 113 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 123 | 0 | 0 | 0 | 31 | 25 | 0 | 316 |
| 8:00 AM | 120 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 24 | 138 | 0 | 0 | 0 | 42 | 35 | 0 | 361 |
| 8:15 AM | 138 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 127 | 0 | 0 | 0 | 27 | 22 | 0 | 339 |
| 8:30 AM | 134 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 25 | 135 | 0 | 0 | 0 | 29 | 19 | 0 | 347 |
| 8:45 AM | 75 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 25 | 161 | 0 | 0 | 0 | 25 | 33 | 0 | 320 |
| 9:00 AM | 120 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | 147 | 0 | 0 | 0 | 26 | 26 | 0 | 339 |
| 9:15 AM | 139 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 21 | 163 | 0 | 0 | 0 | 28 | 35 | 0 | 390 |
| 9:30 AM | 120 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 28 | 120 | 0 | 0 | 0 | 28 | 40 | 0 | 340 |
| 9:45 AM | 114 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 87 | 0 | 0 | 0 | 49 | 29 | 0 | 309 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 1339 | 20 | 9 | 0 | 0 | 0 | 0 | 0 | 274 | 1381 | 0 | 0 | 0 | 368 | 341 | 0 | 3732 |
| **APPROACH %'s :** | 97.88% | 1.46% | 0.66% | 0.00% | | | | | 16.56% | 83.44% | 0.00% | 0.00% | 0.00% | 51.90% | 48.10% | 0.00% | |
| **PEAK HR :** | 08:30 AM - 09:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 468 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 85 | 606 | 0 | 0 | 0 | 108 | 113 | 0 | 1396 |
| **PEAK HR FACTOR :** | 0.842 | 0.563 | 0.583 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.850 | 0.929 | 0.000 | 0.000 | 0.000 | 0.931 | 0.807 | 0.000 | 0.895 |
| | 0.846 | | | | | | | | 0.929 | | | | 0.877 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.5 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 2 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 89 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 49 | 52 | 0 | 0 | 0 | 31 | 108 | 0 | 338 |
| 3:15 PM | 88 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 54 | 33 | 0 | 0 | 0 | 33 | 106 | 0 | 320 |
| 3:30 PM | 63 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 71 | 47 | 0 | 0 | 0 | 28 | 105 | 0 | 321 |
| 3:45 PM | 72 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 41 | 0 | 0 | 0 | 46 | 96 | 0 | 313 |
| 4:00 PM | 65 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 45 | 0 | 0 | 0 | 41 | 165 | 0 | 411 |
| 4:15 PM | 59 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 80 | 42 | 0 | 0 | 0 | 49 | 137 | 0 | 377 |
| 4:30 PM | 69 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 39 | 0 | 0 | 0 | 46 | 156 | 0 | 375 |
| 4:45 PM | 73 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 50 | 0 | 0 | 0 | 54 | 154 | 0 | 397 |
| 5:00 PM | 86 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 51 | 0 | 0 | 0 | 67 | 203 | 0 | 478 |
| 5:15 PM | 55 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 84 | 44 | 0 | 0 | 0 | 68 | 192 | 0 | 454 |
| 5:30 PM | 81 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 51 | 0 | 0 | 0 | 63 | 209 | 0 | 491 |
| 5:45 PM | 77 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 58 | 0 | 0 | 0 | 79 | 214 | 0 | 504 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 877 | 75 | 7 | 0 | 0 | 0 | 0 | 0 | 817 | 553 | 0 | 0 | 0 | 605 | 1845 | 0 | 4779 |
| **APPROACH %'s :** | 91.45% | 7.82% | 0.73% | 0.00% | | | | | 59.64% | 40.36% | 0.00% | 0.00% | 0.00% | 24.69% | 75.31% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 299 | 27 | 1 | 0 | 0 | 0 | 0 | 0 | 301 | 204 | 0 | 0 | 0 | 277 | 818 | 0 | 1927 |
| **PEAK HR FACTOR :** | 0.869 | 0.675 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.896 | 0.879 | 0.000 | 0.000 | 0.000 | 0.877 | 0.956 | 0.000 | 0.956 |
| | 0.908 | | | | | | | | 0.956 | | | | 0.934 | | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** MTA Dwy

**East/West** Campo de Cahuenga

Day: Tuesday Date: 11/27/2018 Weather: SUNNY

Hours: 7-10 & 3-6 Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 0 | 1 | 13 | 39 |
| **BIKES** | 1 | 2 | 16 | 17 |
| **BUSES** | 80 | 0 | 55 | 25 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 6 | 8.00 | 20 | 8.00 | 190 | 8.45 | 57 | 8.45 |
| *PM PK 15 MIN* | 6 | 15.00 | 47 | 17.00 | 57 | 17.00 | 256 | 17.45 |
| *AM PK HOUR* | 18 | 7.15 | 64 | 8.00 | 613 | 8.30 | 214 | 8.45 |
| *PM PK HOUR* | 16 | 16.30 | 171 | 17.00 | 201 | 17.00 | 945 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 9 | 1 | 6 | 16 |
| *8-9* | 11 | 0 | 7 | 18 |
| *9-10* | 6 | 0 | 7 | 13 |
| *15-16* | 9 | 0 | 6 | 15 |
| *16-17* | 9 | 0 | 5 | 14 |
| *17-18* | 11 | 0 | 4 | 15 |
| TOTAL | 55 | 1 | 35 | 91 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 12 | 0 | 36 | 48 |
| *8-9* | 16 | 0 | 48 | 64 |
| *9-10* | 5 | 2 | 23 | 30 |
| *15-16* | 17 | 0 | 37 | 54 |
| *16-17* | 12 | 0 | 104 | 116 |
| *17-18* | 19 | 0 | 152 | 171 |
| TOTAL | 81 | 2 | 400 | 483 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 64 | 13 | 0 | 18 | 0 |
| 82 | 22 | 0 | 40 | 0 |
| 43 | 16 | 0 | 36 | 0 |
| 69 | 8 | 2 | 13 | 3 |
| 130 | 16 | 6 | 20 | 4 |
| 186 | 17 | 0 | 42 | 0 |
| 574 | 92 | 8 | 169 | 7 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 82 | 206 | 10 | 298 |
| *8-9* | 69 | 474 | 8 | 551 |
| *9-10* | 32 | 430 | 10 | 472 |
| *15-16* | 11 | 130 | 10 | 151 |
| *16-17* | 21 | 150 | 10 | 181 |
| *17-18* | 31 | 158 | 12 | 201 |
| TOTAL | 246 | 1548 | 60 | 1854 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 8 | 149 | 7 | 164 |
| *8-9* | 7 | 185 | 3 | 195 |
| *9-10* | 6 | 203 | 3 | 212 |
| *15-16* | 6 | 500 | 3 | 509 |
| *16-17* | 2 | 580 | 8 | 590 |
| *17-18* | 4 | 940 | 1 | 945 |
| TOTAL | 33 | 2557 | 25 | 2615 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 462 | 0 | 0 | 4 | 0 |
| 746 | 0 | 0 | 4 | 0 |
| 684 | 0 | 0 | 1 | 0 |
| 660 | 0 | 0 | 3 | 1 |
| 771 | 0 | 0 | 5 | 0 |
| 1146 | 0 | 0 | 3 | 0 |
| 4469 | 0 | 0 | 20 | 1 |

Prepared by National Data & Surveying Services

# MTA Dwy & Campo de Cahuenga

## Peak Hour Turning Movement Count

**ID:** 18-05756-005
**City:** Los Angeles

**Day:** Tuesday
**Date:** 11/27/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 08:30 AM - 09:30 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### MTA Dwy — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 31 | 2 | 12 | 0 | 58 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 152 | 0 | 19 | 0 | 31 | PM |

### Campo de Cahuenga — EASTBOUND

| AM | NOON | PM | | |
|---|---|---|---|---|
| 232 | 0 | 1104 | ⇦ | |
| 0 | 0 | 1 | ↶ | 0 |
| 54 | 0 | 30 | ↱ | 1 |
| 548 | 0 | 158 | → | 3 |
| 11 | 0 | 12 | ↳ | 0 |
| AM | NOON | PM | | |

### Campo de Cahuenga — WESTBOUND

| PM | NOON | AM | | |
|---|---|---|---|---|
| 1 | 0 | 4 | ↰ | 0 |
| 940 | 0 | 192 | ← | 3 |
| 4 | 0 | 5 | ↰ | 1 |
| 0 | 0 | 0 | ↰ | 0 |
| 181 | 0 | 566 | ⇨ | |
| PM | NOON | AM | | |

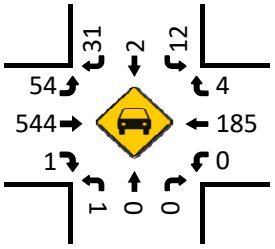
### MTA Dwy — NORTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| PM | 16 | 0 | 11 | 0 | 4 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 18 | 0 | 9 | 0 | 6 | AM |

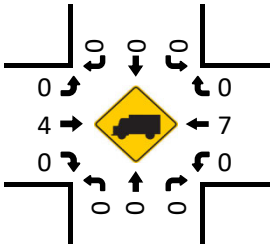
| | | | | |
|---|---|---|---|---|
| ↶ | ↰ | ↑ | ↱ | |
| 1 | 0 | 1 | 0 | |
| 0 | 1 | 0 | 1 | |

| CONTROL | | | |
|---|---|---|---|
| Signalized | | | |
| TEV | 874 | 0 | 1332 |
| | AM | NOON | PM |
| PHF | 0.82 | | 0.92 |

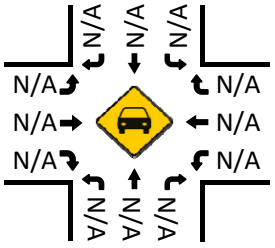
### Cars (AM)



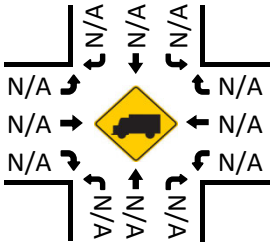

### HT (AM)



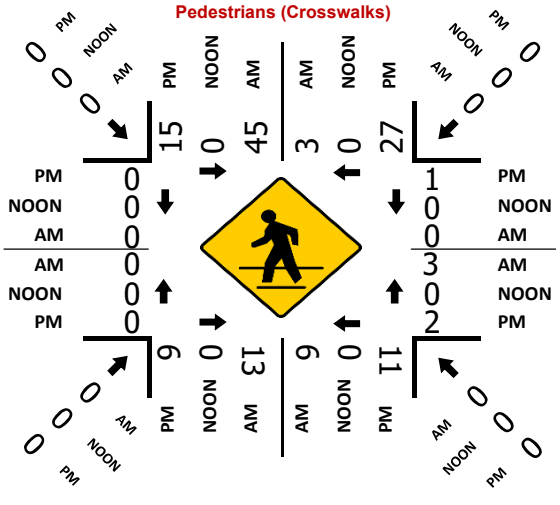

### Cars (NOON)



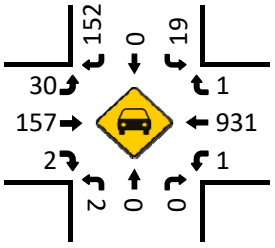

### HT (NOON)



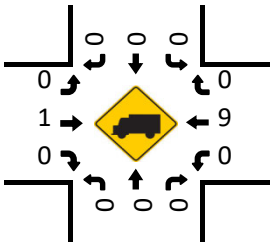

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** MTA Dwy & Campo de Cahuenga
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05756-005
**Date:** 11/27/2018

**Total**

| NS/EW Streets: | MTA Dwy | | | | MTA Dwy | | | | Campo de Cahuenga | | | | Campo de Cahuenga | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 2 | 0 | 2 | 0 | 3 | 0 | 11 | 0 | 17 | 27 | 1 | 0 | 3 | 28 | 3 | 0 | 97 |
| 7:15 AM | 2 | 1 | 1 | 0 | 3 | 0 | 10 | 0 | 23 | 34 | 4 | 0 | 2 | 32 | 1 | 0 | 113 |
| 7:30 AM | 3 | 0 | 2 | 0 | 5 | 0 | 9 | 0 | 19 | 70 | 1 | 0 | 2 | 38 | 1 | 0 | 150 |
| 7:45 AM | 2 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 23 | 75 | 4 | 0 | 1 | 51 | 2 | 0 | 166 |
| 8:00 AM | 5 | 0 | 1 | 0 | 6 | 0 | 14 | 0 | 18 | 70 | 2 | 0 | 2 | 41 | 1 | 0 | 160 |
| 8:15 AM | 1 | 0 | 2 | 0 | 2 | 0 | 14 | 0 | 22 | 110 | 1 | 0 | 3 | 47 | 0 | 0 | 202 |
| 8:30 AM | 3 | 0 | 2 | 0 | 2 | 0 | 9 | 0 | 15 | 122 | 1 | 0 | 2 | 41 | 1 | 0 | 198 |
| 8:45 AM | 2 | 0 | 2 | 0 | 6 | 0 | 11 | 0 | 14 | 172 | 4 | 0 | 0 | 56 | 1 | 0 | 268 |
| 9:00 AM | 3 | 0 | 2 | 0 | 3 | 2 | 2 | 0 | 9 | 122 | 2 | 0 | 2 | 45 | 1 | 0 | 193 |
| 9:15 AM | 1 | 0 | 0 | 0 | 1 | 0 | 9 | 0 | 16 | 132 | 4 | 0 | 1 | 50 | 1 | 0 | 215 |
| 9:30 AM | 2 | 0 | 1 | 0 | 1 | 0 | 7 | 0 | 5 | 91 | 2 | 0 | 1 | 56 | 0 | 0 | 166 |
| 9:45 AM | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 2 | 85 | 2 | 0 | 2 | 52 | 1 | 0 | 153 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 26 | 1 | 20 | 0 | 33 | 2 | 107 | 0 | 183 | 1110 | 28 | 0 | 21 | 537 | 13 | 0 | 2081 |
| **APPROACH %'s :** | 55.32% | 2.13% | 42.55% | 0.00% | 23.24% | 1.41% | 75.35% | 0.00% | 13.85% | 84.03% | 2.12% | 0.00% | 3.68% | 94.05% | 2.28% | 0.00% | |
| **PEAK HR :** | **08:30 AM - 09:30 AM** | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 9 | 0 | 6 | 0 | 12 | 2 | 31 | 0 | 54 | 548 | 11 | 0 | 5 | 192 | 4 | 0 | 874 |
| **PEAK HR FACTOR :** | 0.750 | 0.000 | 0.750 | 0.000 | 0.500 | 0.250 | 0.705 | 0.000 | 0.844 | 0.797 | 0.688 | 0.000 | 0.625 | 0.857 | 1.000 | 0.000 | 0.815 |
| | 0.750 | | | | 0.662 | | | | 0.807 | | | | 0.882 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 1 | 3 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 3 | 0 | 3 | 0 | 4 | 0 | 6 | 0 | 2 | 45 | 2 | 0 | 2 | 135 | 0 | 0 | 202 |
| 3:15 PM | 2 | 0 | 0 | 0 | 3 | 0 | 10 | 0 | 4 | 27 | 3 | 2 | 3 | 126 | 1 | 0 | 181 |
| 3:30 PM | 2 | 0 | 3 | 0 | 6 | 0 | 11 | 0 | 3 | 23 | 2 | 0 | 0 | 117 | 1 | 0 | 168 |
| 3:45 PM | 2 | 0 | 0 | 0 | 4 | 0 | 10 | 0 | 0 | 35 | 3 | 0 | 1 | 122 | 1 | 0 | 178 |
| 4:00 PM | 3 | 0 | 1 | 0 | 4 | 0 | 20 | 0 | 4 | 41 | 2 | 0 | 0 | 156 | 2 | 0 | 233 |
| 4:15 PM | 2 | 0 | 0 | 0 | 3 | 0 | 23 | 0 | 4 | 37 | 2 | 1 | 1 | 109 | 2 | 0 | 184 |
| 4:30 PM | 1 | 0 | 2 | 0 | 3 | 0 | 38 | 0 | 5 | 35 | 4 | 0 | 0 | 153 | 3 | 0 | 244 |
| 4:45 PM | 3 | 0 | 2 | 0 | 2 | 0 | 23 | 0 | 7 | 37 | 2 | 0 | 1 | 162 | 1 | 0 | 240 |
| 5:00 PM | 3 | 0 | 1 | 0 | 3 | 0 | 44 | 0 | 11 | 43 | 3 | 0 | 1 | 236 | 1 | 0 | 346 |
| 5:15 PM | 2 | 0 | 2 | 0 | 5 | 0 | 38 | 0 | 9 | 31 | 3 | 0 | 0 | 234 | 0 | 0 | 324 |
| 5:30 PM | 1 | 0 | 0 | 0 | 5 | 0 | 30 | 0 | 5 | 39 | 2 | 0 | 1 | 216 | 0 | 0 | 299 |
| 5:45 PM | 5 | 0 | 1 | 0 | 6 | 0 | 40 | 0 | 5 | 45 | 4 | 1 | 2 | 254 | 0 | 0 | 363 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 29 | 0 | 15 | 0 | 48 | 0 | 293 | 0 | 59 | 438 | 32 | 4 | 12 | 2020 | 12 | 0 | 2962 |
| **APPROACH %'s :** | 65.91% | 0.00% | 34.09% | 0.00% | 14.08% | 0.00% | 85.92% | 0.00% | 11.07% | 82.18% | 6.00% | 0.75% | 0.59% | 98.83% | 0.59% | 0.00% | |
| **PEAK HR :** | **05:00 PM - 06:00 PM** | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 11 | 0 | 4 | 0 | 19 | 0 | 152 | 0 | 30 | 158 | 12 | 1 | 4 | 940 | 1 | 0 | 1332 |
| **PEAK HR FACTOR :** | 0.550 | 0.000 | 0.500 | 0.000 | 0.792 | 0.000 | 0.864 | 0.000 | 0.682 | 0.878 | 0.750 | 0.250 | 0.500 | 0.925 | 0.250 | 0.000 | 0.917 |
| | 0.625 | | | | 0.910 | | | | 0.882 | | | | 0.923 | | | | |

City Of Los Angeles

Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:

**North/South** Lankershim Blvd

**East/West** Campo De Cahuenga/Universal Hollywood Dr

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 77 | 132 | 31 | 32 |
| **BIKES** | 24 | 25 | 5 | 9 |
| **BUSES** | 0 | 31 | 28 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 417 | 9.00 | 679 | 8.00 | 170 | 9.15 | 83 | 9.45 |
| *PM PK 15 MIN* | 441 | 17.45 | 414 | 17.45 | 58 | 15.00 | 256 | 17.30 |
| *AM PK HOUR* | 1570 | 8.45 | 2527 | 7.15 | 587 | 8.30 | 272 | 9.00 |
| *PM PK HOUR* | 1510 | 17.00 | 1588 | 17.00 | 210 | 17.00 | 943 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 54 | 602 | 121 | 777 |
| *8-9* | 51 | 962 | 221 | 1234 |
| *9-10* | 36 | 1202 | 293 | 1531 |
| *15-16* | 123 | 980 | 141 | 1244 |
| *16-17* | 145 | 1079 | 132 | 1356 |
| *17-18* | 174 | 1209 | 127 | 1510 |
| TOTAL | 583 | 6034 | 1035 | 7652 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 366 | 1844 | 121 | 2331 |
| *8-9* | 659 | 1643 | 129 | 2431 |
| *9-10* | 623 | 1096 | 146 | 1865 |
| *15-16* | 101 | 733 | 303 | 1137 |
| *16-17* | 119 | 736 | 352 | 1207 |
| *17-18* | 147 | 987 | 454 | 1588 |
| TOTAL | 2015 | 7039 | 1505 | 10559 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 3108 | 0 | 1 | 0 | 0 |
| 3665 | 4 | 1 | 3 | 1 |
| 3396 | 2 | 0 | 0 | 0 |
| 2381 | 2 | 0 | 0 | 0 |
| 2563 | 2 | 0 | 0 | 0 |
| 3098 | 1 | 0 | 1 | 0 |
| 18211 | 11 | 2 | 4 | 1 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 103 | 101 | 33 | 237 |
| *8-9* | 193 | 278 | 31 | 502 |
| *9-10* | 223 | 266 | 20 | 509 |
| *15-16* | 117 | 36 | 23 | 176 |
| *16-17* | 100 | 33 | 20 | 153 |
| *17-18* | 132 | 36 | 42 | 210 |
| TOTAL | 868 | 750 | 169 | 1787 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 20 | 27 | 48 | 95 |
| *8-9* | 36 | 47 | 78 | 161 |
| *9-10* | 62 | 79 | 131 | 272 |
| *15-16* | 80 | 133 | 163 | 376 |
| *16-17* | 108 | 235 | 224 | 567 |
| *17-18* | 143 | 385 | 415 | 943 |
| TOTAL | 449 | 906 | 1059 | 2414 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 332 | 24 | 1 | 19 | 2 |
| 663 | 59 | 3 | 30 | 0 |
| 781 | 119 | 17 | 36 | 4 |
| 552 | 79 | 21 | 27 | 0 |
| 720 | 66 | 3 | 41 | 0 |
| 1153 | 72 | 13 | 26 | 1 |
| 4201 | 419 | 58 | 179 | 7 |

Prepared by National Data & Surveying Services

# Lankershim Blvd & Campo De Cahuenga/Universal Hollywood Dr

## Peak Hour Turning Movement Count

**ID:** 18-05609-007
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 08:30 AM - 09:30 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### Lankershim Blvd — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 119 | 1352 | 745 | 0 | 1539 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 454 | 987 | 147 | 0 | 1756 | PM |
| | 1 | 3 | 2 | 0 | | |

### EASTBOUND — Campo De Cahuenga/Universal H

| AM | NOON | PM | |
|---|---|---|---|
| 228 | 0 | 1013 | |
| 0 | 0 | 0 | 0 |
| 236 | 0 | 132 | 2 |
| 329 | 0 | 36 | 2 |
| 22 | 0 | 42 | 0 |
| AM | NOON | PM | |

### WESTBOUND — Campo De Cahuenga/Universal H

| PM | NOON | AM | |
|---|---|---|---|
| 415 | 0 | 104 | 1 |
| 385 | 0 | 64 | 2 |
| 142 | 0 | 45 | 1 |
| 1 | 0 | 3 | 0 |
| 311 | 0 | 1349 | |
| PM | NOON | AM | |

### CONTROL

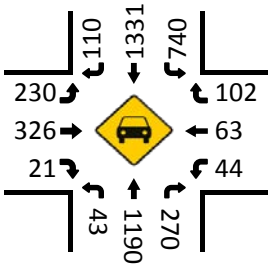
Signalized

| | | | |
|---|---|---|---|
| TEV | 4535 AM | 0 NOON | 4251 PM |
| PHF | 1.00 | | 0.92 |

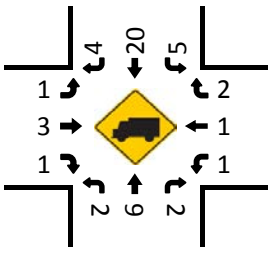
### NORTHBOUND — Lankershim Blvd

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 0 | 1 | 3 | 1 | |
| PM | 1171 | 0 | 174 | 1209 | 127 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 1419 | 0 | 45 | 1199 | 272 | AM |

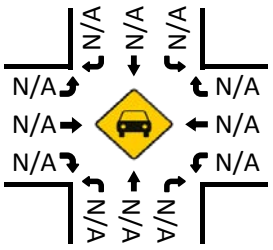
### Cars (AM)



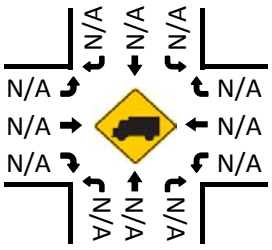

### HT (AM)



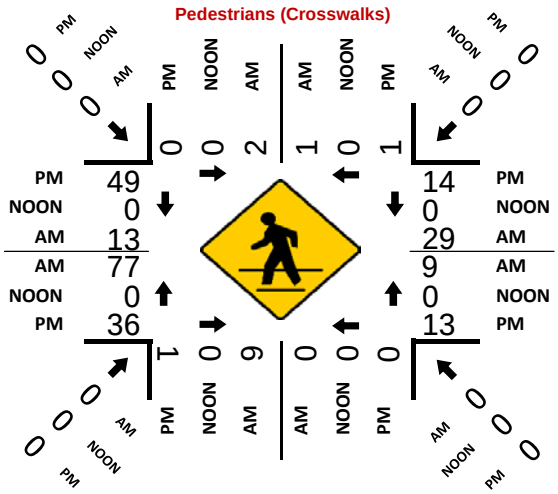

### Cars (NOON)



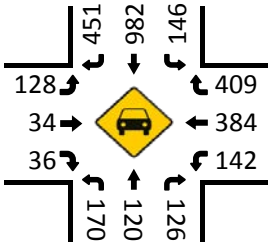

### HT (NOON)



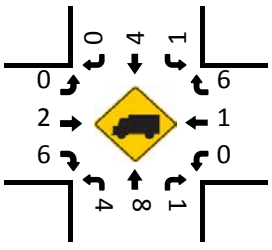

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Lankershim Blvd & Campo De Cahuenga/Universal Hollywood Dr
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-007
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Lankershim Blvd | | | | Lankershim Blvd | | | | Campo De Cahuenga/Universal Hollywood Dr | | | | Campo De Cahuenga/Universal Hollywood Dr | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 3 | 1 | 0 | 2 | 3 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 17 | 93 | 29 | 0 | 60 | 402 | 21 | 0 | 15 | 12 | 7 | 0 | 4 | 5 | 11 | 1 | 677 |
| 7:15 AM | 10 | 119 | 28 | 0 | 81 | 470 | 25 | 0 | 13 | 18 | 5 | 0 | 5 | 6 | 12 | 0 | 792 |
| 7:30 AM | 17 | 161 | 30 | 0 | 106 | 511 | 50 | 0 | 30 | 22 | 9 | 0 | 5 | 5 | 10 | 0 | 956 |
| 7:45 AM | 10 | 229 | 34 | 0 | 119 | 461 | 25 | 0 | 45 | 49 | 12 | 0 | 5 | 11 | 15 | 0 | 1015 |
| 8:00 AM | 13 | 193 | 45 | 0 | 164 | 473 | 42 | 0 | 40 | 48 | 14 | 0 | 7 | 9 | 17 | 0 | 1065 |
| 8:15 AM | 12 | 219 | 51 | 0 | 136 | 388 | 32 | 0 | 47 | 67 | 6 | 0 | 9 | 10 | 17 | 0 | 994 |
| 8:30 AM | 8 | 267 | 67 | 0 | 174 | 431 | 26 | 0 | 43 | 75 | 4 | 0 | 8 | 12 | 19 | 1 | 1135 |
| 8:45 AM | 18 | 283 | 58 | 0 | 185 | 351 | 29 | 0 | 63 | 88 | 7 | 0 | 9 | 16 | 25 | 2 | 1134 |
| 9:00 AM | 9 | 344 | 64 | 0 | 215 | 280 | 26 | 0 | 57 | 77 | 3 | 0 | 12 | 13 | 32 | 0 | 1132 |
| 9:15 AM | 10 | 305 | 83 | 0 | 171 | 290 | 38 | 0 | 73 | 89 | 8 | 0 | 16 | 23 | 28 | 0 | 1134 |
| 9:30 AM | 10 | 300 | 86 | 0 | 135 | 273 | 36 | 0 | 49 | 57 | 4 | 0 | 14 | 19 | 32 | 0 | 1015 |
| 9:45 AM | 7 | 253 | 60 | 0 | 102 | 253 | 46 | 0 | 44 | 43 | 5 | 0 | 20 | 24 | 39 | 0 | 896 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 141 | 2766 | 635 | 0 | 1648 | 4583 | 396 | 0 | 519 | 645 | 84 | 0 | 114 | 153 | 257 | 4 | 11945 |
| **APPROACH %'s :** | 3.98% | 78.09% | 17.93% | 0.00% | 24.87% | 69.16% | 5.98% | 0.00% | 41.59% | 51.68% | 6.73% | 0.00% | 21.59% | 28.98% | 48.67% | 0.76% | |
| **PEAK HR :** | 08:30 AM - 09:30 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 45 | 1199 | 272 | 0 | 745 | 1352 | 119 | 0 | 236 | 329 | 22 | 0 | 45 | 64 | 104 | 3 | 4535 |
| **PEAK HR FACTOR :** | 0.625 | 0.871 | 0.819 | 0.000 | 0.866 | 0.784 | 0.783 | 0.000 | 0.808 | 0.924 | 0.688 | 0.000 | 0.703 | 0.696 | 0.813 | 0.375 | 0.999 |
| | 0.909 | | | | 0.878 | | | | 0.863 | | | | 0.806 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 1 | 0 | 2 | 3 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 26 | 254 | 33 | 0 | 30 | 175 | 70 | 0 | 38 | 10 | 10 | 0 | 22 | 38 | 43 | 4 | 753 |
| 3:15 PM | 31 | 231 | 32 | 0 | 22 | 204 | 80 | 0 | 22 | 5 | 7 | 0 | 21 | 31 | 44 | 0 | 730 |
| 3:30 PM | 30 | 241 | 37 | 0 | 27 | 171 | 78 | 0 | 26 | 10 | 3 | 0 | 18 | 28 | 37 | 0 | 706 |
| 3:45 PM | 36 | 254 | 39 | 0 | 22 | 183 | 75 | 0 | 31 | 11 | 3 | 0 | 15 | 36 | 39 | 0 | 744 |
| 4:00 PM | 53 | 253 | 42 | 0 | 21 | 161 | 81 | 0 | 28 | 5 | 10 | 0 | 21 | 56 | 53 | 1 | 785 |
| 4:15 PM | 27 | 259 | 32 | 0 | 29 | 186 | 89 | 0 | 28 | 8 | 3 | 0 | 25 | 47 | 40 | 0 | 773 |
| 4:30 PM | 31 | 282 | 36 | 0 | 29 | 199 | 85 | 0 | 23 | 8 | 5 | 0 | 32 | 72 | 68 | 0 | 870 |
| 4:45 PM | 34 | 285 | 22 | 0 | 40 | 190 | 97 | 0 | 21 | 12 | 2 | 0 | 29 | 60 | 63 | 0 | 855 |
| 5:00 PM | 41 | 282 | 44 | 0 | 29 | 234 | 123 | 0 | 35 | 11 | 6 | 0 | 28 | 84 | 111 | 0 | 1028 |
| 5:15 PM | 51 | 283 | 25 | 0 | 34 | 267 | 101 | 0 | 32 | 7 | 10 | 0 | 29 | 86 | 102 | 1 | 1028 |
| 5:30 PM | 38 | 282 | 23 | 0 | 41 | 226 | 119 | 0 | 34 | 11 | 11 | 0 | 40 | 113 | 103 | 0 | 1041 |
| 5:45 PM | 44 | 362 | 35 | 0 | 43 | 260 | 111 | 0 | 31 | 7 | 15 | 0 | 45 | 102 | 99 | 0 | 1154 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 442 | 3268 | 400 | 0 | 367 | 2456 | 1109 | 0 | 349 | 105 | 85 | 0 | 325 | 753 | 802 | 6 | 10467 |
| **APPROACH %'s :** | 10.75% | 79.51% | 9.73% | 0.00% | 9.33% | 62.46% | 28.20% | 0.00% | 64.75% | 19.48% | 15.77% | 0.00% | 17.23% | 39.93% | 42.52% | 0.32% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 174 | 1209 | 127 | 0 | 147 | 987 | 454 | 0 | 132 | 36 | 42 | 0 | 142 | 385 | 415 | 1 | 4251 |
| **PEAK HR FACTOR :** | 0.853 | 0.835 | 0.722 | 0.000 | 0.855 | 0.924 | 0.923 | 0.000 | 0.943 | 0.818 | 0.700 | 0.000 | 0.789 | 0.852 | 0.935 | 0.250 | 0.921 |
| | 0.856 | | | | 0.959 | | | | 0.938 | | | | 0.921 | | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** Lankershim Blvd

**East/West** US-101 Freeway NB Off-Ramp

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 36 | 110 | 0 | 48 |
| **BIKES** | 18 | 13 | 0 | 0 |
| **BUSES** | 0 | 8 | 0 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 170 | 9.30 | 525 | 7.30 | 0 | 0.00 | 302 | 9.00 |
| *PM PK 15 MIN* | 218 | 17.45 | 312 | 17.45 | 0 | 0.00 | 231 | 17.45 |
| *AM PK HOUR* | 554 | 8.45 | 1980 | 7.15 | 0 | 0.00 | 1082 | 8.30 |
| *PM PK HOUR* | 771 | 17.00 | 1171 | 17.00 | 0 | 0.00 | 849 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 276 | 0 | 276 |
| *8-9* | 0 | 438 | 0 | 438 |
| *9-10* | 1 | 543 | 0 | 544 |
| *15-16* | 0 | 592 | 0 | 592 |
| *16-17* | 0 | 671 | 0 | 671 |
| *17-18* | 0 | 771 | 0 | 771 |
| TOTAL | 1 | 3291 | 0 | 3292 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 1912 | 0 | 1912 |
| *8-9* | 0 | 1703 | 0 | 1703 |
| *9-10* | 0 | 1177 | 0 | 1177 |
| *15-16* | 0 | 835 | 0 | 835 |
| *16-17* | 0 | 841 | 0 | 841 |
| *17-18* | 0 | 1171 | 0 | 1171 |
| TOTAL | 0 | 7639 | 0 | 7639 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 2188 | 1 | 0 | 0 | 0 |
| 2141 | 0 | 0 | 0 | 0 |
| 1721 | 0 | 0 | 0 | 0 |
| 1427 | 1 | 0 | 0 | 0 |
| 1512 | 0 | 0 | 0 | 0 |
| 1942 | 0 | 0 | 0 | 0 |
| 10931 | 2 | 0 | 0 | 0 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 0 | 0 | 0 |
| *8-9* | 0 | 0 | 0 | 0 |
| *9-10* | 0 | 0 | 0 | 0 |
| *15-16* | 0 | 0 | 0 | 0 |
| *16-17* | 0 | 0 | 0 | 0 |
| *17-18* | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 58 | 0 | 504 | 562 |
| *8-9* | 67 | 0 | 803 | 870 |
| *9-10* | 69 | 0 | 968 | 1037 |
| *15-16* | 104 | 0 | 638 | 742 |
| *16-17* | 95 | 0 | 677 | 772 |
| *17-18* | 111 | 0 | 738 | 849 |
| TOTAL | 504 | 0 | 4328 | 4832 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 562 | 0 | 0 | 14 | 0 |
| 870 | 0 | 0 | 13 | 2 |
| 1037 | 0 | 0 | 16 | 0 |
| 742 | 0 | 0 | 25 | 2 |
| 772 | 0 | 0 | 27 | 1 |
| 849 | 0 | 0 | 29 | 7 |
| 4832 | 0 | 0 | 124 | 12 |

Prepared by National Data & Surveying Services

# Lankershim Blvd & US-101 Freeway NB Off-Ramp

## Peak Hour Turning Movement Count

**ID:** 18-05609-008
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 07:45 AM - 08:45 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### Lankershim Blvd — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 0 | 1820 | 0 | 0 | 1137 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 0 | 1171 | 0 | 0 | 1509 | PM |

### US-101 Freeway NB Off-Ramp — EASTBOUND

| AM | NOON | PM | |
|---|---|---|---|
| 0 | 0 | 0 | |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| AM | NOON | PM | |

### WESTBOUND — US-101 Freeway NB Off-Ramp

| PM | NOON | AM | |
|---|---|---|---|
| 738 | 0 | 757 | 2 |
| 0 | 0 | 0 | 0 |
| 111 | 0 | 69 | 1 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | |
| PM | NOON | AM | |

### Lankershim Blvd — NORTHBOUND

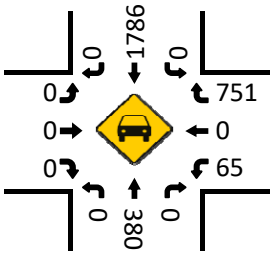
| | | | | | | |
|---|---|---|---|---|---|---|
| PM | 1282 | 0 | 0 | 771 | 0 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 1889 | 0 | 0 | 380 | 0 | AM |

| | | | | |
|---|---|---|---|---|
| | 0 | 3 | 0 | 0 |
| | 0 | 0 | 2 | 0 |

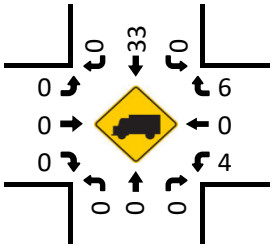
**CONTROL:** Signalized

| | | | |
|---|---|---|---|
| TEV | 3026 | 0 | 2791 |
| | AM | NOON | PM |
| PHF | 0.95 | | 0.92 |

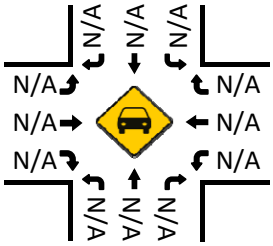
### Cars (AM)



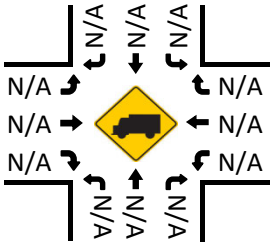

### HT (AM)



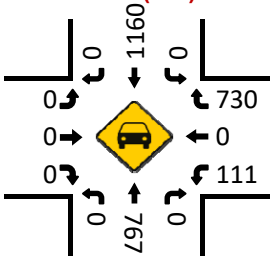

### Cars (NOON)



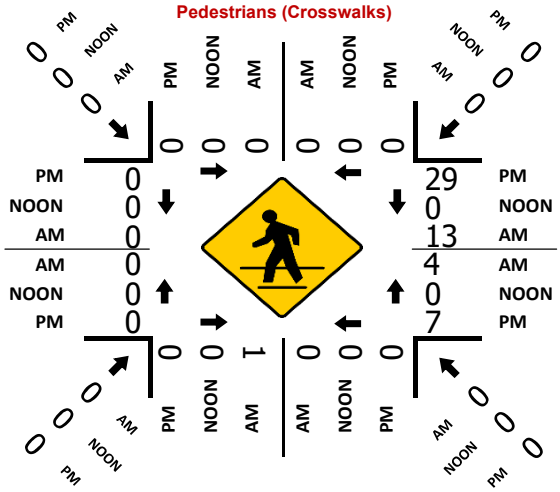

### HT (NOON)



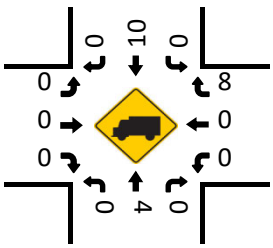

### Cars (PM)




### Pedestrians (Crosswalks)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Lankershim Blvd & US-101 Freeway NB Off-Ramp
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-008
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Lankershim Blvd | | | | Lankershim Blvd | | | | US-101 Freeway NB Off-Ramp | | | | US-101 Freeway NB Off-Ramp | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 57 | 0 | 0 | 0 | 407 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 80 | 0 | 559 |
| 7:15 AM | 0 | 64 | 0 | 0 | 0 | 483 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 97 | 0 | 661 |
| 7:30 AM | 0 | 78 | 0 | 0 | 0 | 525 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 142 | 0 | 758 |
| 7:45 AM | 0 | 77 | 0 | 0 | 0 | 497 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 185 | 0 | 772 |
| 8:00 AM | 0 | 91 | 0 | 0 | 0 | 475 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 158 | 0 | 736 |
| 8:15 AM | 0 | 83 | 0 | 0 | 0 | 416 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 198 | 0 | 719 |
| 8:30 AM | 0 | 129 | 0 | 0 | 0 | 432 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 216 | 0 | 799 |
| 8:45 AM | 0 | 135 | 0 | 0 | 0 | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 231 | 0 | 757 |
| 9:00 AM | 0 | 124 | 0 | 0 | 0 | 283 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 286 | 0 | 709 |
| 9:15 AM | 0 | 125 | 0 | 0 | 0 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 280 | 0 | 747 |
| 9:30 AM | 0 | 169 | 0 | 1 | 0 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 221 | 0 | 683 |
| 9:45 AM | 0 | 125 | 0 | 0 | 0 | 296 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 181 | 0 | 619 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 1257 | 0 | 1 | 0 | 4792 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 0 | 2275 | 0 | 8519 |
| **APPROACH %'s :** | 0.00% | 99.92% | 0.00% | 0.08% | 0.00% | 100.00% | 0.00% | 0.00% | | | | | 7.86% | 0.00% | 92.14% | 0.00% | |
| **PEAK HR :** | 07:45 AM - 08:45 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 380 | 0 | 0 | 0 | 1820 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 0 | 757 | 0 | 3026 |
| **PEAK HR FACTOR :** | 0.000 | 0.736 | 0.000 | 0.000 | 0.000 | 0.915 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.784 | 0.000 | 0.876 | 0.000 | 0.947 |
| | | 0.736 | | | | 0.915 | | | | | | | | 0.868 | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 0 | 146 | 0 | 0 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 158 | 0 | 531 |
| 3:15 PM | 0 | 144 | 0 | 0 | 0 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 148 | 0 | 550 |
| 3:30 PM | 0 | 155 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 148 | 0 | 532 |
| 3:45 PM | 0 | 147 | 0 | 0 | 0 | 203 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 184 | 0 | 556 |
| 4:00 PM | 0 | 183 | 0 | 0 | 0 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 167 | 0 | 556 |
| 4:15 PM | 0 | 151 | 0 | 0 | 0 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 160 | 0 | 537 |
| 4:30 PM | 0 | 186 | 0 | 0 | 0 | 232 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 168 | 0 | 608 |
| 4:45 PM | 0 | 151 | 0 | 0 | 0 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 182 | 0 | 583 |
| 5:00 PM | 0 | 193 | 0 | 0 | 0 | 270 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 181 | 0 | 667 |
| 5:15 PM | 0 | 186 | 0 | 0 | 0 | 306 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 164 | 0 | 681 |
| 5:30 PM | 0 | 174 | 0 | 0 | 0 | 283 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 192 | 0 | 682 |
| 5:45 PM | 0 | 218 | 0 | 0 | 0 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 201 | 0 | 761 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 2034 | 0 | 0 | 0 | 2847 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 0 | 2053 | 0 | 7244 |
| **APPROACH %'s :** | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 100.00% | 0.00% | 0.00% | | | | | 13.12% | 0.00% | 86.88% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 771 | 0 | 0 | 0 | 1171 | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 0 | 738 | 0 | 2791 |
| **PEAK HR FACTOR :** | 0.000 | 0.884 | 0.000 | 0.000 | 0.000 | 0.938 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.841 | 0.000 | 0.918 | 0.000 | 0.917 |
| | | 0.884 | | | | 0.938 | | | | | | | | 0.919 | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** Lankershim Blvd

**East/West** Ventura Blvd/Cahuenga Blvd

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 9 | 117 | 88 | 65 |
| **BIKES** | 8 | 13 | 19 | 18 |
| **BUSES** | 0 | 8 | 7 | 7 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 60 | 8.30 | 536 | 7.45 | 422 | 8.30 | 184 | 9.30 |
| *PM PK 15 MIN* | 68 | 15.00 | 343 | 17.45 | 257 | 17.00 | 296 | 17.15 |
| *AM PK HOUR* | 218 | 8.30 | 2013 | 7.15 | 1581 | 7.15 | 605 | 9.00 |
| *PM PK HOUR* | 237 | 17.00 | 1274 | 17.00 | 903 | 16.45 | 1150 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 25 | 53 | 50 | 128 |
| *8-9* | 42 | 101 | 66 | 209 |
| *9-10* | 37 | 103 | 59 | 199 |
| *15-16* | 50 | 104 | 76 | 230 |
| *16-17* | 46 | 103 | 66 | 215 |
| *17-18* | 52 | 123 | 62 | 237 |
| TOTAL | 252 | 587 | 379 | 1218 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 887 | 100 | 989 | 1976 |
| *8-9* | 752 | 90 | 907 | 1749 |
| *9-10* | 597 | 75 | 565 | 1237 |
| *15-16* | 351 | 68 | 508 | 927 |
| *16-17* | 321 | 109 | 535 | 965 |
| *17-18* | 456 | 141 | 677 | 1274 |
| TOTAL | 3364 | 583 | 4181 | 8128 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 2104 | 10 | 1 | 10 | 0 |
| 1958 | 18 | 0 | 16 | 0 |
| 1436 | 23 | 8 | 19 | 0 |
| 1157 | 35 | 0 | 24 | 0 |
| 1180 | 46 | 4 | 29 | 2 |
| 1511 | 48 | 4 | 37 | 4 |
| 9346 | 180 | 17 | 135 | 6 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 45 | 1429 | 9 | 1483 |
| *8-9* | 60 | 1472 | 15 | 1547 |
| *9-10* | 78 | 1304 | 28 | 1410 |
| *15-16* | 88 | 688 | 15 | 791 |
| *16-17* | 101 | 708 | 19 | 828 |
| *17-18* | 100 | 775 | 17 | 892 |
| TOTAL | 472 | 6376 | 103 | 6951 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 16 | 123 | 173 | 312 |
| *8-9* | 13 | 190 | 278 | 481 |
| *9-10* | 23 | 226 | 356 | 605 |
| *15-16* | 39 | 457 | 399 | 895 |
| *16-17* | 31 | 564 | 459 | 1054 |
| *17-18* | 41 | 579 | 530 | 1150 |
| TOTAL | 163 | 2139 | 2195 | 4497 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 1795 | 25 | 1 | 0 | 0 |
| 2028 | 48 | 0 | 2 | 0 |
| 2015 | 34 | 13 | 1 | 0 |
| 1686 | 49 | 3 | 2 | 0 |
| 1882 | 44 | 1 | 0 | 1 |
| 2042 | 62 | 6 | 1 | 0 |
| 11448 | 262 | 24 | 6 | 1 |

Prepared by National Data & Surveying Services

# Lankershim Blvd & Ventura Blvd/Cahuenga Blvd

## Peak Hour Turning Movement Count

**ID:** 18-05609-009
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 07:15 AM - 08:15 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### Lankershim Blvd — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 999 | 103 | 911 | 0 | 308 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 677 | 141 | 456 | 0 | 753 | PM |
| | 1 | 0.5 | 1.5 | 0 | | |

### Ventura Blvd/Cahuenga Blvd — EASTBOUND

| AM | NOON | PM | |
|---|---|---|---|
| 1178 | 0 | 1308 | |
| 0 | 0 | 0 | 0 |
| 47 | 0 | 100 | 1 |
| 1524 | 0 | 775 | 3 |
| 10 | 0 | 17 | 0 |
| AM | NOON | PM | |

### CONTROL

Signalized

| | | | |
|---|---|---|---|
| TEV | 4098 | 0 | 3553 |
| | AM | NOON | PM |
| PHF | 0.98 | | 0.99 |

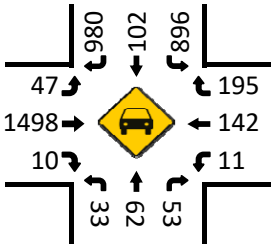
### Ventura Blvd/Cahuenga Blvd — WESTBOUND

| PM | NOON | AM | |
|---|---|---|---|
| 530 | 0 | 197 | 1 |
| 579 | 0 | 146 | 2 |
| 41 | 0 | 11 | 1 |
| 0 | 0 | 0 | 0 |
| 1293 | 0 | 2488 | |
| PM | NOON | AM | |

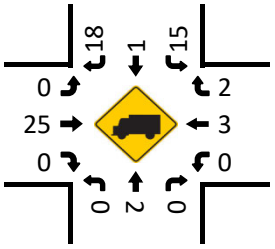
### Lankershim Blvd — NORTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 0 | 1 | 0 | | |
| PM | 199 | 0 | 52 | 123 | 62 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 124 | 0 | 33 | 64 | 53 | AM |

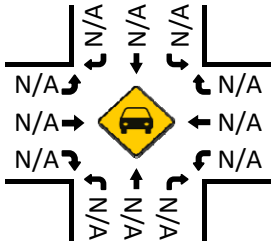
### Cars (AM)



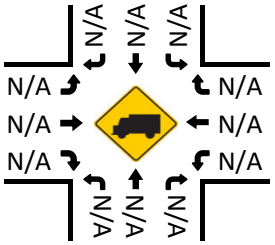

### HT (AM)



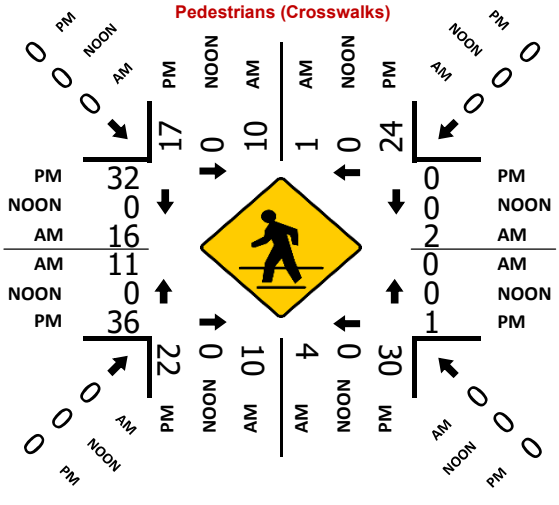

### Cars (NOON)



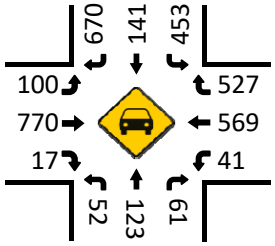

### HT (NOON)



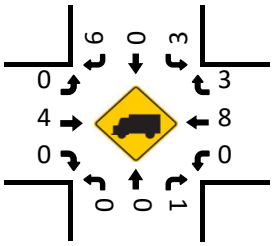

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Lankershim Blvd & Ventura Blvd/Cahuenga Blvd
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-009
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Lankershim Blvd | | | | Lankershim Blvd | | | | Ventura Blvd/Cahuenga Blvd | | | | Ventura Blvd/Cahuenga Blvd | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 1 | 0 | 0 | 1.5 | 0.5 | 1 | 0 | 1 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 4 | 12 | 14 | 0 | 168 | 24 | 232 | 0 | 13 | 302 | 3 | 0 | 7 | 34 | 35 | 0 | 848 |
| 7:15 AM | 3 | 11 | 9 | 0 | 219 | 23 | 251 | 0 | 10 | 399 | 4 | 0 | 5 | 26 | 41 | 0 | 1001 |
| 7:30 AM | 6 | 10 | 16 | 0 | 247 | 27 | 249 | 0 | 11 | 385 | 0 | 0 | 2 | 33 | 57 | 0 | 1043 |
| 7:45 AM | 12 | 20 | 11 | 0 | 253 | 26 | 257 | 0 | 11 | 343 | 2 | 0 | 2 | 30 | 40 | 0 | 1007 |
| 8:00 AM | 12 | 23 | 17 | 0 | 192 | 27 | 242 | 0 | 15 | 397 | 4 | 0 | 2 | 57 | 59 | 0 | 1047 |
| 8:15 AM | 8 | 16 | 20 | 0 | 216 | 26 | 220 | 0 | 9 | 314 | 3 | 0 | 5 | 33 | 61 | 0 | 931 |
| 8:30 AM | 14 | 29 | 17 | 0 | 183 | 18 | 231 | 0 | 16 | 402 | 4 | 0 | 2 | 61 | 81 | 0 | 1058 |
| 8:45 AM | 8 | 33 | 12 | 0 | 161 | 19 | 214 | 0 | 20 | 359 | 4 | 0 | 4 | 39 | 77 | 0 | 950 |
| 9:00 AM | 9 | 25 | 19 | 0 | 131 | 10 | 139 | 0 | 16 | 388 | 5 | 0 | 6 | 55 | 87 | 0 | 890 |
| 9:15 AM | 9 | 32 | 11 | 0 | 172 | 19 | 166 | 0 | 20 | 323 | 2 | 0 | 3 | 43 | 79 | 0 | 879 |
| 9:30 AM | 10 | 26 | 19 | 0 | 124 | 22 | 142 | 0 | 25 | 315 | 13 | 0 | 8 | 66 | 110 | 0 | 880 |
| 9:45 AM | 9 | 20 | 10 | 0 | 170 | 24 | 118 | 0 | 17 | 278 | 8 | 0 | 6 | 62 | 80 | 0 | 802 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 104 | 257 | 175 | 0 | 2236 | 265 | 2461 | 0 | 183 | 4205 | 52 | 0 | 52 | 539 | 807 | 0 | 11336 |
| **APPROACH %'s :** | 19.40% | 47.95% | 32.65% | 0.00% | 45.06% | 5.34% | 49.60% | 0.00% | 4.12% | 94.71% | 1.17% | 0.00% | 3.72% | 38.56% | 57.73% | 0.00% | |
| **PEAK HR :** | 07:15 AM - 08:15 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 33 | 64 | 53 | 0 | 911 | 103 | 999 | 0 | 47 | 1524 | 10 | 0 | 11 | 146 | 197 | 0 | 4098 |
| **PEAK HR FACTOR :** | 0.688 | 0.696 | 0.779 | 0.000 | 0.900 | 0.954 | 0.972 | 0.000 | 0.783 | 0.955 | 0.625 | 0.000 | 0.550 | 0.640 | 0.835 | 0.000 | 0.979 |
| | 0.721 | | | | 0.939 | | | | 0.950 | | | | 0.750 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 0 | 0 | 1.5 | 0.5 | 1 | 0 | 1 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 14 | 36 | 18 | 0 | 81 | 13 | 137 | 0 | 27 | 164 | 3 | 0 | 10 | 106 | 86 | 0 | 695 |
| 3:15 PM | 13 | 21 | 20 | 0 | 111 | 26 | 128 | 0 | 24 | 198 | 5 | 0 | 11 | 109 | 100 | 1 | 767 |
| 3:30 PM | 14 | 24 | 21 | 0 | 67 | 16 | 132 | 0 | 18 | 165 | 2 | 0 | 7 | 136 | 108 | 0 | 710 |
| 3:45 PM | 9 | 23 | 17 | 0 | 92 | 13 | 111 | 0 | 19 | 161 | 5 | 0 | 10 | 106 | 105 | 0 | 671 |
| 4:00 PM | 15 | 25 | 17 | 0 | 72 | 27 | 122 | 0 | 30 | 171 | 3 | 0 | 2 | 143 | 127 | 2 | 756 |
| 4:15 PM | 12 | 24 | 17 | 0 | 85 | 19 | 102 | 0 | 17 | 179 | 5 | 0 | 8 | 151 | 103 | 0 | 722 |
| 4:30 PM | 5 | 31 | 13 | 0 | 82 | 22 | 154 | 0 | 31 | 171 | 5 | 0 | 9 | 133 | 124 | 0 | 780 |
| 4:45 PM | 14 | 23 | 19 | 0 | 82 | 41 | 157 | 0 | 23 | 187 | 6 | 0 | 10 | 137 | 105 | 0 | 804 |
| 5:00 PM | 9 | 26 | 8 | 0 | 93 | 37 | 163 | 0 | 26 | 224 | 7 | 0 | 9 | 147 | 138 | 0 | 887 |
| 5:15 PM | 15 | 23 | 24 | 0 | 134 | 35 | 148 | 0 | 19 | 199 | 3 | 0 | 17 | 142 | 137 | 0 | 896 |
| 5:30 PM | 14 | 35 | 19 | 0 | 114 | 36 | 171 | 0 | 27 | 179 | 3 | 0 | 6 | 147 | 126 | 0 | 877 |
| 5:45 PM | 14 | 39 | 11 | 0 | 115 | 33 | 195 | 0 | 28 | 173 | 4 | 0 | 9 | 143 | 129 | 0 | 893 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 148 | 330 | 204 | 0 | 1128 | 318 | 1720 | 0 | 289 | 2171 | 51 | 0 | 108 | 1600 | 1388 | 3 | 9458 |
| **APPROACH %'s :** | 21.70% | 48.39% | 29.91% | 0.00% | 35.63% | 10.04% | 54.33% | 0.00% | 11.51% | 86.46% | 2.03% | 0.00% | 3.48% | 51.63% | 44.79% | 0.10% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 52 | 123 | 62 | 0 | 456 | 141 | 677 | 0 | 100 | 775 | 17 | 0 | 41 | 579 | 530 | 0 | 3553 |
| **PEAK HR FACTOR :** | 0.867 | 0.788 | 0.646 | 0.000 | 0.851 | 0.953 | 0.868 | 0.000 | 0.893 | 0.865 | 0.607 | 0.000 | 0.603 | 0.985 | 0.960 | 0.000 | 0.991 |
| | 0.871 | | | | 0.929 | | | | 0.868 | | | | 0.971 | | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** US-101 Freeway SB Ramps-Regal Pl

**East/West** Cahuenga Blvd

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 7 | 47 | 126 | 56 |
| **BIKES** | 2 | 0 | 15 | 16 |
| **BUSES** | 0 | 0 | 7 | 7 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 23 | 9.00 | 224 | 9.45 | 634 | 7.30 | 125 | 9.45 |
| *PM PK 15 MIN* | 21 | 16.30 | 154 | 17.30 | 325 | 17.15 | 269 | 17.15 |
| *AM PK HOUR* | 70 | 8.45 | 638 | 9.00 | 2417 | 7.15 | 420 | 9.00 |
| *PM PK HOUR* | 61 | 15.15 | 552 | 17.00 | 1248 | 17.00 | 973 | 17.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 11 | 9 | 6 | 26 |
| *8-9* | 25 | 5 | 19 | 49 |
| *9-10* | 36 | 10 | 16 | 62 |
| *15-16* | 32 | 12 | 11 | 55 |
| *16-17* | 26 | 12 | 15 | 53 |
| *17-18* | 30 | 13 | 11 | 54 |
| TOTAL | 160 | 61 | 78 | 299 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 174 | 4 | 103 | 281 |
| *8-9* | 225 | 2 | 140 | 367 |
| *9-10* | 424 | 6 | 208 | 638 |
| *15-16* | 267 | 4 | 200 | 471 |
| *16-17* | 253 | 12 | 192 | 457 |
| *17-18* | 310 | 19 | 223 | 552 |
| TOTAL | 1653 | 47 | 1066 | 2766 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 307 | 4 | 0 | 12 | 0 |
| 416 | 25 | 0 | 18 | 1 |
| 700 | 10 | 0 | 11 | 0 |
| 526 | 27 | 0 | 17 | 0 |
| 510 | 9 | 0 | 18 | 4 |
| 606 | 32 | 1 | 16 | 1 |
| 3065 | 107 | 1 | 92 | 6 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 668 | 1623 | 10 | 2301 |
| *8-9* | 567 | 1682 | 13 | 2262 |
| *9-10* | 458 | 1452 | 14 | 1924 |
| *15-16* | 394 | 654 | 19 | 1067 |
| *16-17* | 403 | 668 | 19 | 1090 |
| *17-18* | 444 | 790 | 14 | 1248 |
| TOTAL | 2934 | 6869 | 89 | 9892 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 5 | 197 | 7 | 209 |
| *8-9* | 11 | 298 | 15 | 324 |
| *9-10* | 14 | 384 | 22 | 420 |
| *15-16* | 8 | 650 | 60 | 718 |
| *16-17* | 16 | 802 | 53 | 871 |
| *17-18* | 21 | 876 | 76 | 973 |
| TOTAL | 75 | 3207 | 233 | 3515 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 2510 | 0 | 0 | 3 | 0 |
| 2586 | 0 | 0 | 14 | 2 |
| 2344 | 0 | 0 | 8 | 0 |
| 1785 | 0 | 0 | 6 | 0 |
| 1961 | 0 | 0 | 8 | 2 |
| 2221 | 0 | 0 | 25 | 0 |
| 13407 | 0 | 0 | 64 | 4 |

Prepared by National Data & Surveying Services

# US-101 Freeway SB Ramps-Regal Pl & Cahuenga Blvd

## Peak Hour Turning Movement Count

**ID:** 18-05609-013
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 09:00 AM - 10:00 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### US-101 Freeway SB Ramps-Regal Pl — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 208 | 6 | 424 | 0 | 490 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 223 | 19 | 310 | 0 | 533 | PM |

### Cahuenga Blvd — EASTBOUND

| AM | NOON | PM | |
|---|---|---|---|
| 628 | 0 | 1129 | ⇦ |
| 0 | 0 | 0 | 0 ↶ |
| 458 | 0 | 444 | 2 ↱ |
| 1452 | 0 | 790 | 2 → |
| 14 | 0 | 14 | 0 ↴ |
| AM | NOON | PM | |

### CONTROL

Signalized

| | | | |
|---|---|---|---|
| TEV | 3044 | 0 | 2827 |
| | AM | NOON | PM |
| PHF | 0.97 | | 0.97 |

### Cahuenga Blvd — WESTBOUND

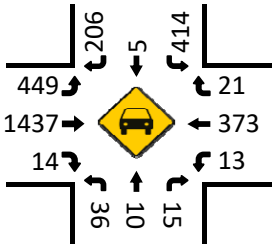
| PM | NOON | AM | |
|---|---|---|---|
| 76 | 0 | 22 | 1 ↰ |
| 876 | 0 | 384 | 2 ← |
| 19 | 0 | 14 | 1 ↰ |
| 2 | 0 | 0 | 0 ↰ |
| 1113 | 0 | 1892 | ⇨ |
| PM | NOON | AM | |

| | | | | | | |
|---|---|---|---|---|---|---|
| PM | 52 | 0 | 30 | 13 | 11 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 34 | 0 | 36 | 10 | 16 | AM |

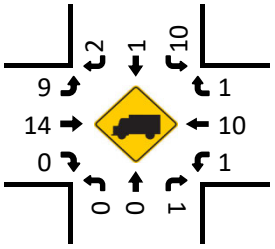
0 0 1 0 ↶ ↰ ↑ ↱

### NORTHBOUND — US-101 Freeway SB Ramps-Regal Pl

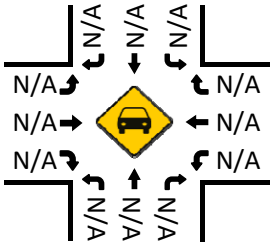
**Cars (AM)**



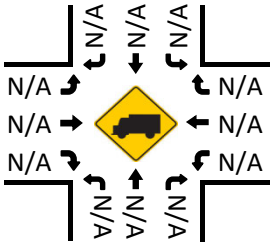

**HT (AM)**



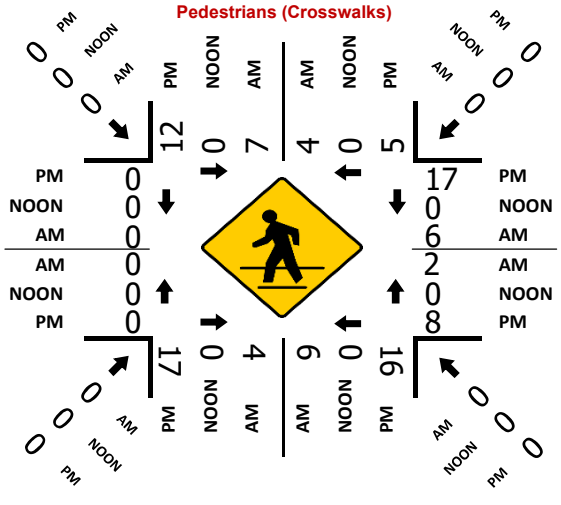

**Cars (NOON)**



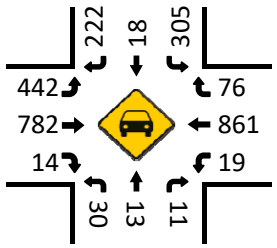

**HT (NOON)**



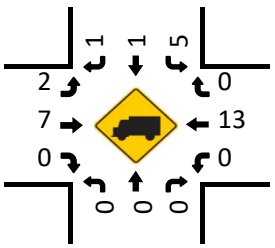

**Pedestrians (Crosswalks)**




**Cars (PM)**




**HT (PM)**



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** US-101 Freeway SB Ramps-Regal Pl & Cahuenga Blvd
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-013
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | US-101 Freeway SB Ramps-Regal Pl | | | | US-101 Freeway SB Ramps-Regal Pl | | | | Cahuenga Blvd | | | | Cahuenga Blvd | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 1 | 0 | 0 | 1.5 | 0.5 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 1 | 1 | 0 | 0 | 39 | 3 | 24 | 0 | 147 | 331 | 2 | 0 | 0 | 46 | 2 | 0 | 596 |
| 7:15 AM | 1 | 2 | 2 | 0 | 35 | 0 | 24 | 0 | 188 | 407 | 0 | 0 | 1 | 47 | 1 | 0 | 708 |
| 7:30 AM | 5 | 0 | 2 | 0 | 30 | 0 | 35 | 0 | 180 | 448 | 6 | 0 | 0 | 52 | 2 | 0 | 760 |
| 7:45 AM | 4 | 6 | 2 | 0 | 70 | 1 | 20 | 0 | 153 | 437 | 2 | 0 | 4 | 52 | 2 | 0 | 753 |
| 8:00 AM | 5 | 2 | 5 | 0 | 58 | 0 | 37 | 0 | 160 | 428 | 8 | 0 | 3 | 67 | 3 | 0 | 776 |
| 8:15 AM | 4 | 2 | 3 | 0 | 55 | 0 | 24 | 0 | 146 | 395 | 2 | 0 | 1 | 76 | 6 | 0 | 714 |
| 8:30 AM | 6 | 0 | 6 | 0 | 54 | 1 | 44 | 0 | 128 | 454 | 1 | 0 | 2 | 78 | 6 | 0 | 780 |
| 8:45 AM | 10 | 1 | 5 | 0 | 58 | 1 | 35 | 0 | 133 | 405 | 2 | 0 | 5 | 77 | 0 | 0 | 732 |
| 9:00 AM | 13 | 6 | 4 | 0 | 73 | 2 | 49 | 0 | 137 | 381 | 5 | 0 | 6 | 79 | 4 | 0 | 759 |
| 9:15 AM | 9 | 2 | 4 | 0 | 77 | 2 | 52 | 0 | 128 | 386 | 3 | 0 | 2 | 88 | 3 | 0 | 756 |
| 9:30 AM | 10 | 2 | 4 | 0 | 97 | 1 | 61 | 0 | 131 | 321 | 6 | 0 | 1 | 103 | 9 | 0 | 746 |
| 9:45 AM | 4 | 0 | 4 | 0 | 177 | 1 | 46 | 0 | 62 | 364 | 0 | 0 | 5 | 114 | 6 | 0 | 783 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 72 | 24 | 41 | 0 | 823 | 12 | 451 | 0 | 1693 | 4757 | 37 | 0 | 30 | 879 | 44 | 0 | 8863 |
| **APPROACH %'s :** | 52.55% | 17.52% | 29.93% | 0.00% | 64.00% | 0.93% | 35.07% | 0.00% | 26.10% | 73.33% | 0.57% | 0.00% | 3.15% | 92.24% | 4.62% | 0.00% | |
| **PEAK HR :** | 09:00 AM - 10:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 36 | 10 | 16 | 0 | 424 | 6 | 208 | 0 | 458 | 1452 | 14 | 0 | 14 | 384 | 22 | 0 | 3044 |
| **PEAK HR FACTOR :** | 0.692 | 0.417 | 1.000 | 0.000 | 0.599 | 0.750 | 0.852 | 0.000 | 0.836 | 0.940 | 0.583 | 0.000 | 0.583 | 0.842 | 0.611 | 0.000 | 0.972 |
| | 0.674 | | | | 0.712 | | | | 0.920 | | | | 0.840 | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 0 | 0 | 1.5 | 0.5 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 3 | 2 | 5 | 0 | 59 | 3 | 48 | 0 | 90 | 161 | 7 | 0 | 2 | 161 | 11 | 0 | 552 |
| 3:15 PM | 8 | 3 | 3 | 0 | 65 | 0 | 44 | 0 | 102 | 166 | 7 | 0 | 1 | 144 | 16 | 0 | 559 |
| 3:30 PM | 10 | 3 | 1 | 0 | 70 | 1 | 56 | 0 | 101 | 152 | 2 | 0 | 4 | 173 | 19 | 0 | 592 |
| 3:45 PM | 11 | 4 | 2 | 0 | 73 | 0 | 52 | 0 | 101 | 175 | 3 | 0 | 1 | 172 | 14 | 0 | 608 |
| 4:00 PM | 9 | 2 | 5 | 0 | 58 | 2 | 58 | 0 | 110 | 169 | 2 | 0 | 7 | 183 | 11 | 1 | 617 |
| 4:15 PM | 3 | 1 | 2 | 0 | 58 | 4 | 51 | 0 | 96 | 158 | 3 | 0 | 3 | 192 | 9 | 1 | 581 |
| 4:30 PM | 8 | 8 | 5 | 0 | 65 | 3 | 45 | 0 | 95 | 162 | 8 | 0 | 1 | 215 | 19 | 0 | 634 |
| 4:45 PM | 6 | 1 | 3 | 0 | 72 | 3 | 38 | 0 | 102 | 179 | 6 | 0 | 3 | 212 | 14 | 0 | 639 |
| 5:00 PM | 6 | 8 | 2 | 0 | 75 | 5 | 57 | 0 | 116 | 189 | 2 | 0 | 6 | 203 | 17 | 1 | 687 |
| 5:15 PM | 3 | 1 | 2 | 0 | 62 | 3 | 59 | 0 | 119 | 201 | 5 | 0 | 2 | 248 | 18 | 1 | 724 |
| 5:30 PM | 8 | 2 | 2 | 0 | 97 | 5 | 52 | 0 | 101 | 188 | 3 | 0 | 7 | 199 | 21 | 0 | 685 |
| 5:45 PM | 13 | 2 | 5 | 0 | 76 | 6 | 55 | 0 | 108 | 212 | 4 | 0 | 4 | 226 | 20 | 0 | 731 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 88 | 37 | 37 | 0 | 830 | 35 | 615 | 0 | 1241 | 2112 | 52 | 0 | 41 | 2328 | 189 | 4 | 7609 |
| **APPROACH %'s :** | 54.32% | 22.84% | 22.84% | 0.00% | 56.08% | 2.36% | 41.55% | 0.00% | 36.45% | 62.03% | 1.53% | 0.00% | 1.60% | 90.87% | 7.38% | 0.16% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 30 | 13 | 11 | 0 | 310 | 19 | 223 | 0 | 444 | 790 | 14 | 0 | 19 | 876 | 76 | 2 | 2827 |
| **PEAK HR FACTOR :** | 0.577 | 0.406 | 0.550 | 0.000 | 0.799 | 0.792 | 0.945 | 0.000 | 0.933 | 0.932 | 0.700 | 0.000 | 0.679 | 0.883 | 0.905 | 0.500 | 0.967 |
| | 0.675 | | | | 0.896 | | | | 0.960 | | | | 0.904 | | | | |

Prepared by National Data & Surveying Services

# Universal Hollywood Dr & Universal City Hilton dwy

## Peak Hour Turning Movement Count

**ID:** 18-05609-022
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 09:00 AM - 10:00 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### Universal Hollywood Dr — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 29 | 525 | 0 | 0 | 238 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 39 | 228 | 0 | 2 | 377 | PM |

### EASTBOUND (Universal City Hilton dwy)

| AM | NOON | PM | |
|---|---|---|---|
| 60 | 0 | 69 | ⇦ |
| 0 | 0 | 0 | ↶ 0 |
| 54 | 0 | 37 | ↱ 0 |
| 0 | 0 | 0 | → 1 |
| 20 | 0 | 23 | ↴ 0 |

### WESTBOUND (Universal City Hilton dwy)

| | PM | NOON | AM |
|---|---|---|---|
| 0 | 0 | 0 | 0 ↰ |
| 0 | 0 | 0 | 0 ← |
| 0 | 0 | 0 | 0 ↰ |
| 0 | 0 | 0 | 0 ↶ |
| ⇨ | 0 | 0 | 0 |

### CONTROL

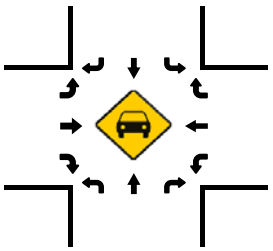
1-Way Stop (EB)

| | | | |
|---|---|---|---|
| TEV | 844 AM | 0 NOON | 699 PM |
| PHF | 0.89 | | 0.81 |

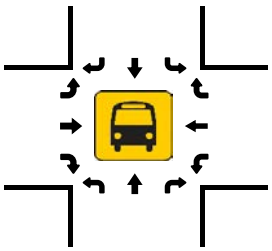
### Universal Hollywood Dr — NORTHBOUND

| | | | | | |
|---|---|---|---|---|---|
| PM | 253 | 2 | 30 | 338 | 0 PM |
| NOON | 0 | 0 | 0 | 0 | 0 NOON |
| AM | 546 | 1 | 31 | 184 | 0 AM |
| | | 0 | 1 | 2 | 0 |

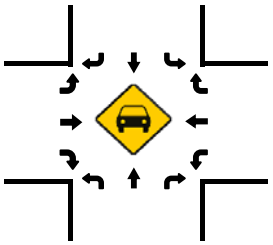
Total Vehicles (AM)



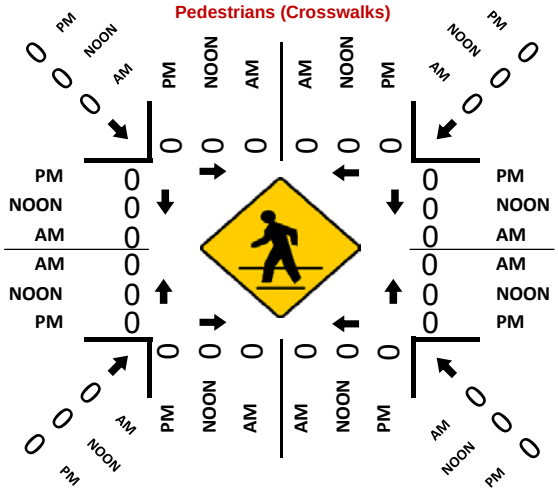
Total Vehicles (AM)



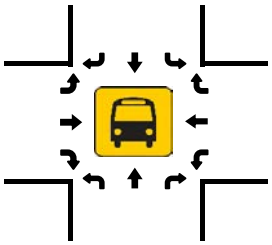
Total Vehicles (NOON)



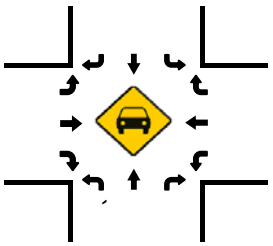
Pedestrians (Crosswalks)



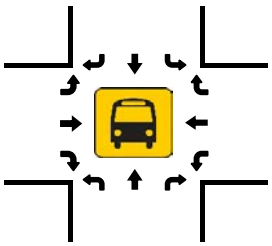
Total Vehicles (NOON)



Total Vehicles (PM)



Total Vehicles (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Universal Hollywood Dr & Universal City Hilton dwy
**City:** Los Angeles
**Control:** 1-Way Stop (EB)

**Project ID:** 18-05609-022
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Universal Hollywood Dr | | | | Universal Hollywood Dr | | | | Universal City Hilton dwy | | | | Universal City Hilton dwy | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 3 | 9 | 0 | 0 | 0 | 40 | 6 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 69 |
| 7:15 AM | 1 | 8 | 0 | 0 | 0 | 46 | 3 | 0 | 7 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 67 |
| 7:30 AM | 2 | 14 | 0 | 0 | 0 | 59 | 3 | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 84 |
| 7:45 AM | 6 | 17 | 0 | 4 | 0 | 88 | 4 | 0 | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 134 |
| 8:00 AM | 2 | 20 | 0 | 2 | 0 | 80 | 8 | 0 | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 124 |
| 8:15 AM | 2 | 15 | 0 | 0 | 0 | 80 | 11 | 0 | 13 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 124 |
| 8:30 AM | 1 | 19 | 0 | 0 | 0 | 99 | 5 | 0 | 11 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 138 |
| 8:45 AM | 7 | 20 | 0 | 0 | 0 | 101 | 12 | 0 | 13 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 157 |
| 9:00 AM | 9 | 37 | 0 | 0 | 0 | 134 | 5 | 0 | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 197 |
| 9:15 AM | 6 | 43 | 0 | 0 | 0 | 158 | 9 | 0 | 14 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 237 |
| 9:30 AM | 8 | 45 | 0 | 0 | 0 | 124 | 8 | 0 | 20 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 212 |
| 9:45 AM | 8 | 59 | 0 | 1 | 0 | 109 | 7 | 0 | 10 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 198 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 55 | 306 | 0 | 7 | 0 | 1118 | 81 | 0 | 126 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 1741 |
| **APPROACH %'s :** | 14.95% | 83.15% | 0.00% | 1.90% | 0.00% | 93.24% | 6.76% | 0.00% | 72.41% | 0.00% | 27.59% | 0.00% | | | | | |
| **PEAK HR :** | **09:00 AM - 10:00 AM** | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 31 | 184 | 0 | 1 | 0 | 525 | 29 | 0 | 54 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 844 |
| **PEAK HR FACTOR :** | 0.861 | 0.780 | 0.000 | 0.250 | 0.000 | 0.831 | 0.806 | 0.000 | 0.675 | 0.000 | 0.714 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.890 |
| | 0.794 | | | | 0.829 | | | | 0.685 | | | | | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 4 | 43 | 0 | 2 | 0 | 42 | 6 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 108 |
| 3:15 PM | 5 | 36 | 0 | 0 | 0 | 38 | 4 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 91 |
| 3:30 PM | 3 | 38 | 0 | 1 | 0 | 37 | 12 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 102 |
| 3:45 PM | 7 | 31 | 0 | 0 | 0 | 38 | 11 | 0 | 9 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 101 |
| 4:00 PM | 6 | 46 | 0 | 1 | 0 | 34 | 8 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 105 |
| 4:15 PM | 4 | 43 | 0 | 0 | 0 | 45 | 11 | 0 | 5 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 115 |
| 4:30 PM | 6 | 65 | 0 | 0 | 0 | 53 | 13 | 1 | 10 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 154 |
| 4:45 PM | 2 | 45 | 0 | 2 | 0 | 45 | 13 | 0 | 11 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 124 |
| 5:00 PM | 10 | 73 | 0 | 1 | 0 | 64 | 13 | 2 | 10 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 181 |
| 5:15 PM | 5 | 64 | 0 | 0 | 0 | 45 | 7 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 130 |
| 5:30 PM | 4 | 84 | 0 | 0 | 0 | 53 | 10 | 0 | 18 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 171 |
| 5:45 PM | 11 | 117 | 0 | 1 | 0 | 66 | 9 | 0 | 5 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 217 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 67 | 685 | 0 | 8 | 0 | 560 | 117 | 3 | 94 | 0 | 64 | 1 | 0 | 0 | 0 | 0 | 1599 |
| **APPROACH %'s :** | 8.82% | 90.13% | 0.00% | 1.05% | 0.00% | 82.35% | 17.21% | 0.44% | 59.12% | 0.00% | 40.25% | 0.63% | | | | | |
| **PEAK HR :** | **05:00 PM - 06:00 PM** | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 30 | 338 | 0 | 2 | 0 | 228 | 39 | 2 | 37 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 699 |
| **PEAK HR FACTOR :** | 0.682 | 0.722 | 0.000 | 0.500 | 0.000 | 0.864 | 0.750 | 0.250 | 0.514 | 0.000 | 0.719 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.805 |
| | 0.717 | | | | 0.851 | | | | 0.750 | | | | | | | | |

City Of Los Angeles

Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:

**North/South** Universal Studios Blvd

**East/West** Buddy Holly Dr/W.C. Fields Dr

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 27 | 60 | 11 | 46 |
| **BIKES** | 0 | 0 | 1 | 0 |
| **BUSES** | 0 | 0 | 0 | 3 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 103 | 9.30 | 81 | 9.45 | 60 | 9.15 | 317 | 9.15 |
| *PM PK 15 MIN* | 85 | 17.30 | 280 | 17.30 | 106 | 17.45 | 118 | 17.45 |
| *AM PK HOUR* | 355 | 9.00 | 265 | 9.00 | 172 | 8.45 | 1161 | 9.00 |
| *PM PK HOUR* | 306 | 17.00 | 985 | 17.00 | 330 | 17.00 | 453 | 16.30 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 10 | 70 | 77 | 157 |
| *8-9* | 31 | 109 | 113 | 253 |
| *9-10* | 27 | 238 | 90 | 355 |
| *15-16* | 13 | 103 | 137 | 253 |
| *16-17* | 10 | 108 | 145 | 263 |
| *17-18* | 7 | 128 | 171 | 306 |
| TOTAL | 98 | 756 | 733 | 1587 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 1 | 63 | 6 | 70 |
| *8-9* | 2 | 105 | 11 | 118 |
| *9-10* | 0 | 229 | 36 | 265 |
| *15-16* | 2 | 497 | 42 | 541 |
| *16-17* | 3 | 617 | 48 | 668 |
| *17-18* | 2 | 892 | 91 | 985 |
| TOTAL | 10 | 2403 | 234 | 2647 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 227 | 1 | 0 | 3 | 0 |
| 371 | 0 | 0 | 0 | 0 |
| 620 | 2 | 4 | 0 | 0 |
| 794 | 1 | 1 | 0 | 0 |
| 931 | 6 | 0 | 0 | 0 |
| 1291 | 0 | 0 | 0 | 0 |
| 4234 | 10 | 5 | 3 | 0 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 46 | 0 | 40 | 86 |
| *8-9* | 94 | 0 | 51 | 145 |
| *9-10* | 93 | 0 | 75 | 168 |
| *15-16* | 16 | 0 | 102 | 118 |
| *16-17* | 14 | 0 | 150 | 164 |
| *17-18* | 52 | 0 | 278 | 330 |
| TOTAL | 315 | 0 | 696 | 1011 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 59 | 106 | 93 | 258 |
| *8-9* | 110 | 179 | 229 | 518 |
| *9-10* | 137 | 268 | 756 | 1161 |
| *15-16* | 117 | 55 | 158 | 330 |
| *16-17* | 192 | 85 | 161 | 438 |
| *17-18* | 189 | 81 | 168 | 438 |
| TOTAL | 804 | 774 | 1565 | 3143 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 344 | 6 | 0 | 1 | 0 |
| 663 | 0 | 0 | 11 | 0 |
| 1329 | 0 | 1 | 23 | 4 |
| 448 | 2 | 0 | 21 | 1 |
| 602 | 0 | 4 | 31 | 0 |
| 768 | 4 | 2 | 18 | 0 |
| 4154 | 12 | 7 | 105 | 5 |

Prepared by National Data & Surveying Services

# Universal Studios Blvd & Buddy Holly Dr/W.C. Fields Dr

## Peak Hour Turning Movement Count

**ID:** 18-05609-014
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| PEAK HOURS | COUNT PERIODS |
|---|---|
| 09:00 AM - 10:00 AM | 07:00 AM - 10:00 AM |
| NONE | NONE |
| 05:00 PM - 06:00 PM | 03:00 PM - 06:00 PM |

### Universal Studios Blvd — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 36 | 229 | 0 | 0 | 1087 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 91 | 892 | 0 | 2 | 349 | PM |

### EASTBOUND — Buddy Holly Dr/W.C. Fields Dr

| AM | NOON | PM | |
|---|---|---|---|
| 331 | 0 | 180 | |
| 0 | 0 | 1 | 0 |
| 93 | 0 | 51 | 1 |
| 0 | 0 | 0 | 0 |
| 75 | 0 | 278 | 1 |

### WESTBOUND — Buddy Holly Dr/W.C. Fields Dr

| PM | NOON | AM | |
|---|---|---|---|
| 168 | 0 | 756 | 3 |
| 81 | 0 | 268 | 1 |
| 189 | 0 | 137 | 1 |
| 0 | 0 | 0 | 0 |
| 171 | 0 | 90 | |

| | | | | | |
|---|---|---|---|---|---|
| | 0.5 | 3.5 | 0 | 0 | |
| | 0 | 1 | 2 | 1 | |

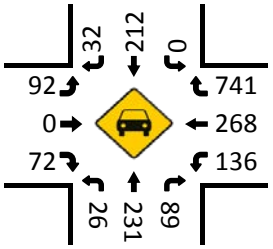
**CONTROL:** Signalized

| | | | |
|---|---|---|---|
| TEV | 1949 AM | 0 NOON | 2059 PM |
| PHF | 0.93 | | 0.94 |

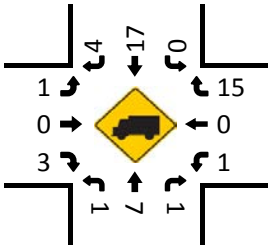
### NORTHBOUND — Universal Studios Blvd

| | | | | | |
|---|---|---|---|---|---|
| PM | 1359 | 0 | 7 | 128 | 171 |
| NOON | 0 | 0 | 0 | 0 | 0 |
| AM | 441 | 0 | 27 | 238 | 90 |

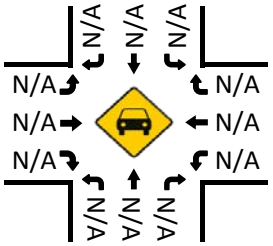
### Cars (AM)



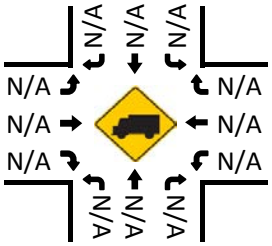

### HT (AM)



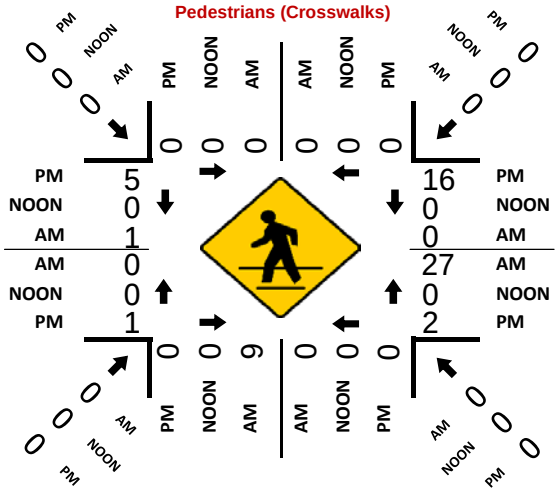

### Cars (NOON)



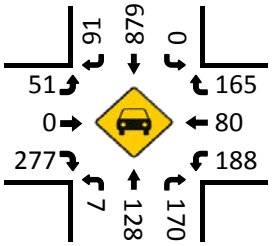

### HT (NOON)



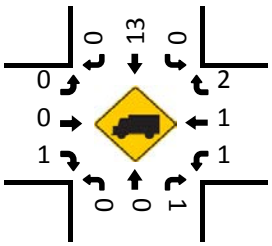

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Universal Studios Blvd & Buddy Holly Dr/W.C. Fields Dr
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-014
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Universal Studios Blvd | | | | Universal Studios Blvd | | | | Buddy Holly Dr/W.C. Fields Dr | | | | Buddy Holly Dr/W.C. Fields Dr | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 2 | 1 | 0 | 0 | 3.5 | 0.5 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 1 | 19 | 18 | 0 | 0 | 10 | 1 | 0 | 6 | 0 | 6 | 0 | 12 | 18 | 14 | 0 | 105 |
| 7:15 AM | 3 | 12 | 18 | 0 | 0 | 9 | 1 | 0 | 11 | 0 | 9 | 1 | 15 | 14 | 15 | 0 | 108 |
| 7:30 AM | 1 | 15 | 18 | 0 | 0 | 28 | 0 | 1 | 9 | 0 | 11 | 0 | 13 | 25 | 25 | 0 | 146 |
| 7:45 AM | 5 | 24 | 23 | 0 | 0 | 16 | 4 | 0 | 19 | 0 | 14 | 0 | 19 | 49 | 39 | 0 | 212 |
| 8:00 AM | 7 | 18 | 28 | 0 | 0 | 13 | 0 | 2 | 27 | 0 | 11 | 1 | 24 | 28 | 39 | 0 | 198 |
| 8:15 AM | 9 | 26 | 33 | 0 | 0 | 36 | 4 | 0 | 13 | 0 | 16 | 0 | 31 | 47 | 48 | 0 | 263 |
| 8:30 AM | 7 | 36 | 28 | 0 | 0 | 30 | 4 | 0 | 27 | 0 | 11 | 0 | 31 | 59 | 79 | 0 | 312 |
| 8:45 AM | 8 | 29 | 24 | 0 | 0 | 26 | 3 | 0 | 26 | 0 | 13 | 0 | 24 | 45 | 63 | 0 | 261 |
| 9:00 AM | 9 | 50 | 16 | 0 | 0 | 43 | 12 | 0 | 16 | 0 | 13 | 0 | 32 | 96 | 139 | 0 | 426 |
| 9:15 AM | 2 | 64 | 19 | 0 | 0 | 59 | 5 | 0 | 39 | 0 | 21 | 0 | 41 | 77 | 199 | 0 | 526 |
| 9:30 AM | 9 | 68 | 26 | 0 | 0 | 57 | 8 | 0 | 22 | 0 | 22 | 0 | 28 | 43 | 204 | 0 | 487 |
| 9:45 AM | 7 | 56 | 29 | 0 | 0 | 70 | 11 | 0 | 16 | 0 | 19 | 0 | 36 | 52 | 214 | 0 | 510 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 68 | 417 | 280 | 0 | 0 | 397 | 53 | 3 | 231 | 0 | 166 | 2 | 306 | 553 | 1078 | 0 | 3554 |
| **APPROACH %'s :** | 8.89% | 54.51% | 36.60% | 0.00% | 0.00% | 87.64% | 11.70% | 0.66% | 57.89% | 0.00% | 41.60% | 0.50% | 15.80% | 28.55% | 55.65% | 0.00% | |
| **PEAK HR :** | 09:00 AM - 10:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 27 | 238 | 90 | 0 | 0 | 229 | 36 | 0 | 93 | 0 | 75 | 0 | 137 | 268 | 756 | 0 | 1949 |
| **PEAK HR FACTOR :** | 0.750 | 0.875 | 0.776 | 0.000 | 0.000 | 0.818 | 0.750 | 0.000 | 0.596 | 0.000 | 0.852 | 0.000 | 0.835 | 0.698 | 0.883 | 0.000 | 0.926 |
| | 0.862 | | | | 0.818 | | | | 0.700 | | | | 0.916 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 1 | 0 | 0 | 3.5 | 0.5 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 5 | 26 | 31 | 0 | 0 | 136 | 13 | 0 | 4 | 0 | 43 | 0 | 25 | 10 | 44 | 0 | 337 |
| 3:15 PM | 4 | 30 | 33 | 0 | 0 | 105 | 10 | 1 | 4 | 0 | 16 | 0 | 28 | 15 | 44 | 0 | 290 |
| 3:30 PM | 3 | 21 | 37 | 0 | 0 | 119 | 6 | 0 | 2 | 0 | 20 | 0 | 34 | 16 | 43 | 0 | 301 |
| 3:45 PM | 1 | 26 | 36 | 0 | 0 | 137 | 13 | 1 | 6 | 0 | 23 | 0 | 30 | 14 | 27 | 0 | 314 |
| 4:00 PM | 2 | 23 | 45 | 0 | 0 | 117 | 15 | 1 | 4 | 0 | 34 | 0 | 51 | 19 | 42 | 0 | 353 |
| 4:15 PM | 4 | 19 | 33 | 0 | 0 | 138 | 9 | 0 | 5 | 0 | 29 | 0 | 45 | 17 | 40 | 0 | 339 |
| 4:30 PM | 2 | 32 | 39 | 0 | 0 | 159 | 9 | 1 | 3 | 0 | 52 | 0 | 46 | 27 | 38 | 0 | 408 |
| 4:45 PM | 2 | 34 | 28 | 0 | 0 | 203 | 15 | 1 | 2 | 0 | 35 | 0 | 50 | 22 | 41 | 0 | 433 |
| 5:00 PM | 1 | 26 | 48 | 0 | 0 | 229 | 13 | 1 | 9 | 0 | 63 | 0 | 47 | 25 | 44 | 0 | 506 |
| 5:15 PM | 1 | 29 | 42 | 0 | 0 | 197 | 14 | 1 | 9 | 0 | 65 | 0 | 50 | 22 | 41 | 0 | 471 |
| 5:30 PM | 2 | 35 | 48 | 0 | 0 | 250 | 30 | 0 | 13 | 0 | 65 | 0 | 45 | 14 | 32 | 0 | 534 |
| 5:45 PM | 3 | 38 | 33 | 0 | 0 | 216 | 34 | 0 | 20 | 0 | 85 | 1 | 47 | 20 | 51 | 0 | 548 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 30 | 339 | 453 | 0 | 0 | 2006 | 181 | 7 | 81 | 0 | 530 | 1 | 498 | 221 | 487 | 0 | 4834 |
| **APPROACH %'s :** | 3.65% | 41.24% | 55.11% | 0.00% | 0.00% | 91.43% | 8.25% | 0.32% | 13.24% | 0.00% | 86.60% | 0.16% | 41.29% | 18.33% | 40.38% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 7 | 128 | 171 | 0 | 0 | 892 | 91 | 2 | 51 | 0 | 278 | 1 | 189 | 81 | 168 | 0 | 2059 |
| **PEAK HR FACTOR :** | 0.583 | 0.842 | 0.891 | 0.000 | 0.000 | 0.892 | 0.669 | 0.500 | 0.638 | 0.000 | 0.818 | 0.250 | 0.945 | 0.810 | 0.824 | 0.000 | 0.939 |
| | 0.900 | | | | 0.879 | | | | 0.778 | | | | 0.928 | | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** Universal Studios Blvd

**East/West** US-101 Freeway SB On-Ramp

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 31 | 58 | 0 | 0 |
| **BIKES** | 1 | 1 | 0 | 0 |
| **BUSES** | 0 | 0 | 0 | 0 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 128 | 9.30 | 107 | 9.15 | 0 | 0.00 | 0 | 0.00 |
| *PM PK 15 MIN* | 96 | 16.30 | 275 | 17.45 | 0 | 0.00 | 0 | 0.00 |
| *AM PK HOUR* | 471 | 9.00 | 374 | 9.00 | 0 | 0.00 | 0 | 0.00 |
| *PM PK HOUR* | 371 | 16.30 | 1003 | 17.00 | 0 | 0.00 | 0 | 0.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 1 | 164 | 187 | 352 |
| *8-9* | 1 | 252 | 175 | 428 |
| *9-10* | 1 | 358 | 112 | 471 |
| *15-16* | 3 | 253 | 79 | 335 |
| *16-17* | 2 | 267 | 78 | 347 |
| *17-18* | 0 | 297 | 69 | 366 |
| TOTAL | 8 | 1591 | 700 | 2299 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 41 | 91 | 0 | 132 |
| *8-9* | 67 | 147 | 0 | 214 |
| *9-10* | 114 | 260 | 0 | 374 |
| *15-16* | 244 | 270 | 0 | 514 |
| *16-17* | 302 | 374 | 0 | 676 |
| *17-18* | 377 | 626 | 0 | 1003 |
| TOTAL | 1145 | 1768 | 0 | 2913 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 484 | 0 | 0 | 0 | 0 |
| 642 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 |
| 849 | 0 | 0 | 0 | 0 |
| 1023 | 0 | 0 | 0 | 0 |
| 1369 | 0 | 0 | 0 | 0 |
| 5212 | 0 | 0 | 0 | 0 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| TOTAL | 0 | 0 | 0 | 0 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| TOTAL | 0 | 0 | 0 | 0 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 0 | 0 | 0 | 112 | 14 |

Prepared by National Data & Surveying Services

# Universal Studios Blvd & US-101 Freeway SB On-Ramp

## Peak Hour Turning Movement Count

**ID:** 18-05609-015
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

**PEAK HOURS**

| | |
|---|---|
| AM | 09:00 AM - 10:00 AM |
| NOON | NONE |
| PM | 05:00 PM - 06:00 PM |

**COUNT PERIODS**

| | |
|---|---|
| AM | 07:00 AM - 10:00 AM |
| NOON | NONE |
| PM | 03:00 PM - 06:00 PM |

**CONTROL:** Signalized

| | AM | NOON | PM |
|---|---|---|---|
| TEV | 845 | 0 | 1369 |
| PHF | 0.95 | | 0.94 |

### Universal Studios Blvd — SOUTHBOUND

| | Left | Thru | Right | U-Turn | |
|---|---|---|---|---|---|
| AM | 0 | 260 | 114 | 0 | 358 |
| NOON | 0 | 0 | 0 | 0 | 0 |
| PM | 0 | 626 | 376 | 1 | 298 |

### US-101 Freeway SB On-Ramp — EASTBOUND

| | Left | Thru | Right | U-Turn |
|---|---|---|---|---|
| AM | 0 | 0 | 0 | 0 |
| NOON | 0 | 0 | 0 | 0 |
| PM | 0 | 0 | 0 | 0 |

### US-101 Freeway SB On-Ramp — WESTBOUND

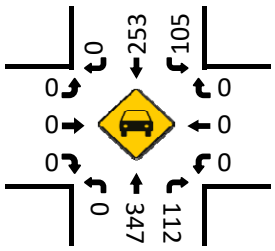
| | Left | Thru | Right | U-Turn |
|---|---|---|---|---|
| AM | 0 | 0 | 0 | 0 |
| NOON | 0 | 0 | 0 | 0 |
| PM | 0 | 0 | 0 | 0 |

| | Thru | Right |
|---|---|---|
| AM | 445 | 226 |
| NOON | 0 | 0 |
| PM | 0 | 0 |

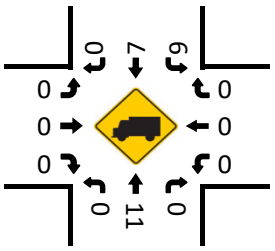
### Universal Studios Blvd — NORTHBOUND

| | Left | Thru | Right | U-Turn | |
|---|---|---|---|---|---|
| AM | 261 | 1 | 0 | 358 | 112 |
| NOON | 0 | 0 | 0 | 0 | 0 |
| PM | 626 | 0 | 0 | 297 | 69 |

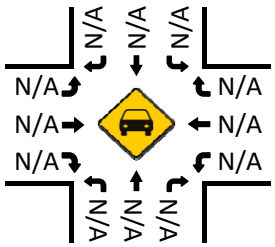
### Cars (AM)



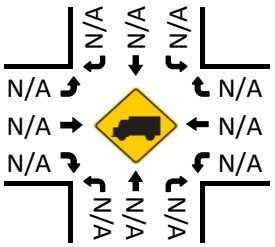

### HT (AM)



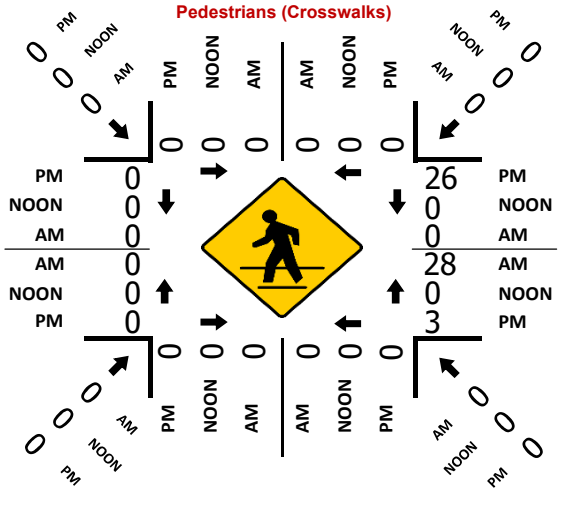

### Cars (NOON)



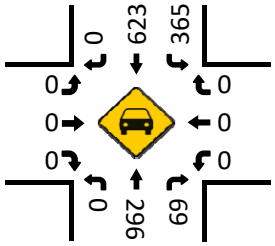

### HT (NOON)



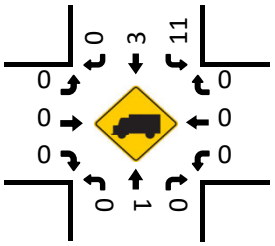

### Pedestrians (Crosswalks)




### Cars (PM)




### HT (PM)



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Universal Studios Blvd & US-101 Freeway SB On-Ramp
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-015
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Universal Studios Blvd | | | | Universal Studios Blvd | | | | US-101 Freeway SB On-Ramp | | | | US-101 Freeway SB On-Ramp | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 2.5 | 0.5 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 39 | 27 | 0 | 6 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 7:15 AM | 0 | 31 | 45 | 0 | 8 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| 7:30 AM | 0 | 37 | 64 | 0 | 20 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 145 |
| 7:45 AM | 0 | 57 | 51 | 1 | 7 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 146 |
| 8:00 AM | 0 | 56 | 47 | 1 | 12 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 144 |
| 8:15 AM | 0 | 64 | 56 | 0 | 21 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 187 |
| 8:30 AM | 0 | 71 | 35 | 0 | 18 | 38 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 163 |
| 8:45 AM | 0 | 61 | 37 | 0 | 15 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 |
| 9:00 AM | 0 | 74 | 37 | 0 | 19 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 181 |
| 9:15 AM | 0 | 86 | 30 | 0 | 39 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 223 |
| 9:30 AM | 0 | 103 | 25 | 0 | 25 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 219 |
| 9:45 AM | 0 | 95 | 20 | 1 | 31 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 222 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 774 | 474 | 3 | 221 | 498 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1971 |
| **APPROACH %'s :** | 0.00% | 61.87% | 37.89% | 0.24% | 30.69% | 69.17% | 0.00% | 0.14% | | | | | | | | | |
| **PEAK HR :** | 09:00 AM - 10:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 358 | 112 | 1 | 114 | 260 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 845 |
| **PEAK HR FACTOR :** | 0.000 | 0.869 | 0.757 | 0.250 | 0.731 | 0.867 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.947 |
| | | 0.920 | | | | 0.874 | | | | | | | | | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2.5 | 0.5 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 0 | 61 | 10 | 2 | 70 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 214 |
| 3:15 PM | 0 | 67 | 12 | 1 | 49 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 193 |
| 3:30 PM | 0 | 61 | 34 | 0 | 56 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 219 |
| 3:45 PM | 0 | 64 | 23 | 0 | 68 | 67 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 223 |
| 4:00 PM | 0 | 72 | 15 | 0 | 69 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 232 |
| 4:15 PM | 0 | 57 | 11 | 1 | 60 | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 223 |
| 4:30 PM | 0 | 71 | 25 | 0 | 85 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 271 |
| 4:45 PM | 0 | 67 | 27 | 1 | 86 | 114 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 297 |
| 5:00 PM | 0 | 71 | 16 | 0 | 108 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 334 |
| 5:15 PM | 0 | 73 | 20 | 0 | 83 | 142 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 319 |
| 5:30 PM | 0 | 83 | 13 | 0 | 95 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 351 |
| 5:45 PM | 0 | 70 | 20 | 0 | 90 | 185 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 365 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 817 | 226 | 5 | 919 | 1270 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3241 |
| **APPROACH %'s :** | 0.00% | 77.96% | 21.56% | 0.48% | 41.91% | 57.91% | 0.00% | 0.18% | | | | | | | | | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 297 | 69 | 0 | 376 | 626 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1369 |
| **PEAK HR FACTOR :** | 0.000 | 0.895 | 0.863 | 0.000 | 0.870 | 0.846 | 0.000 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.938 |
| | | 0.953 | | | | 0.912 | | | | | | | | | | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** Universal Studios Blvd

**East/West** Cahuenga Blvd

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 0 | 24 | 105 | 52 |
| **BIKES** | 0 | 2 | 17 | 14 |
| **BUSES** | 0 | 0 | 7 | 7 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 0 | 0.00 | 77 | 9.45 | 497 | 7.45 | 131 | 9.30 |
| *PM PK 15 MIN* | 0 | 0.00 | 183 | 17.45 | 299 | 17.45 | 208 | 16.00 |
| *AM PK HOUR* | 0 | 0.00 | 262 | 9.00 | 1826 | 7.45 | 459 | 9.00 |
| *PM PK HOUR* | 0 | 0.00 | 632 | 17.00 | 1082 | 17.00 | 776 | 16.00 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 0 | 0 | 0 |
| *8-9* | 0 | 0 | 0 | 0 |
| *9-10* | 0 | 0 | 0 | 0 |
| *15-16* | 0 | 0 | 0 | 0 |
| *16-17* | 0 | 0 | 0 | 0 |
| *17-18* | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 47 | 0 | 46 | 93 |
| *8-9* | 70 | 0 | 81 | 151 |
| *9-10* | 118 | 0 | 144 | 262 |
| *15-16* | 125 | 0 | 146 | 271 |
| *16-17* | 197 | 0 | 177 | 374 |
| *17-18* | 340 | 0 | 292 | 632 |
| TOTAL | 897 | 0 | 886 | 1783 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 93 | 0 | 0 | 4 | 0 |
| 151 | 0 | 0 | 8 | 0 |
| 262 | 0 | 0 | 12 | 0 |
| 271 | 0 | 0 | 4 | 0 |
| 374 | 0 | 0 | 8 | 1 |
| 632 | 0 | 0 | 15 | 6 |
| 1783 | 0 | 0 | 51 | 7 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 241 | 1496 | 0 | 1737 |
| *8-9* | 258 | 1494 | 0 | 1752 |
| *9-10* | 335 | 1418 | 0 | 1753 |
| *15-16* | 171 | 733 | 0 | 904 |
| *16-17* | 166 | 732 | 0 | 898 |
| *17-18* | 170 | 912 | 0 | 1082 |
| TOTAL | 1341 | 6785 | 0 | 8126 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 176 | 107 | 283 |
| *8-9* | 0 | 275 | 168 | 443 |
| *9-10* | 0 | 323 | 136 | 459 |
| *15-16* | 0 | 444 | 160 | 604 |
| *16-17* | 0 | 603 | 173 | 776 |
| *17-18* | 0 | 532 | 200 | 732 |
| TOTAL | 0 | 2353 | 944 | 3297 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 2020 | 0 | 0 | 1 | 0 |
| 2195 | 0 | 0 | 8 | 0 |
| 2212 | 0 | 0 | 21 | 0 |
| 1508 | 0 | 0 | 13 | 3 |
| 1674 | 0 | 0 | 14 | 5 |
| 1814 | 0 | 0 | 22 | 4 |
| 11423 | 0 | 0 | 79 | 12 |

Prepared by National Data & Surveying Services

# Universal Studios Blvd & Cahuenga Blvd

## Peak Hour Turning Movement Count

**ID:** 18-05609-016
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

**PEAK HOURS**

| | |
|---|---|
| AM | 09:00 AM - 10:00 AM |
| NOON | NONE |
| PM | 05:00 PM - 06:00 PM |

**COUNT PERIODS**

| | |
|---|---|
| AM | 07:00 AM - 10:00 AM |
| NOON | NONE |
| PM | 03:00 PM - 06:00 PM |

### Universal Studios Blvd — SOUTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| AM | 144 | 0 | 117 | 1 | 472 | AM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| PM | 292 | 0 | 339 | 1 | 371 | PM |

### Cahuenga Blvd — EASTBOUND

| AM | NOON | PM | | |
|---|---|---|---|---|
| 467 | 0 | 824 | ⇦ | |
| 0 | 0 | 0 | ↶ | 0 |
| 335 | 0 | 170 | ↱ | 2 |
| 1418 | 0 | 912 | → | 2 |
| 0 | 0 | 0 | ↷ | 0 |
| AM | NOON | PM | | |

### Cahuenga Blvd — WESTBOUND

| PM | NOON | AM | | |
|---|---|---|---|---|
| 200 | 0 | 136 | ↰ | 1 |
| 532 | 0 | 323 | ← | 2 |
| 0 | 0 | 0 | ↶ | 0 |
| 0 | 0 | 0 | ↷ | 0 |
| 1251 | 0 | 1535 | ⇨ | |
| PM | NOON | AM | | |

| | | | | |
|---|---|---|---|---|
| | 2 | 0 | 2 | 0 |
| | 0 | 0 | 0 | 0 |

### CONTROL

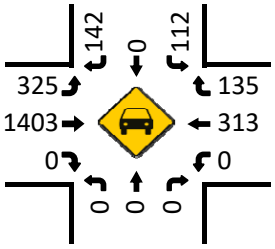
Signalized

| | | | |
|---|---|---|---|
| TEV | 2474 AM | 0 NOON | 2446 PM |
| PHF | 0.91 | | 0.93 |

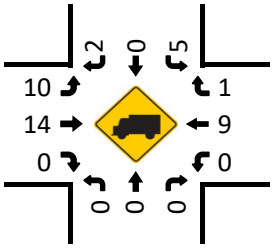
### Universal Studios Blvd — NORTHBOUND

| | | | | | | |
|---|---|---|---|---|---|---|
| PM | 0 | 0 | 0 | 0 | 0 | PM |
| NOON | 0 | 0 | 0 | 0 | 0 | NOON |
| AM | 0 | 0 | 0 | 0 | 0 | AM |

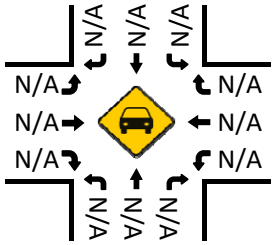
**Cars (AM)**



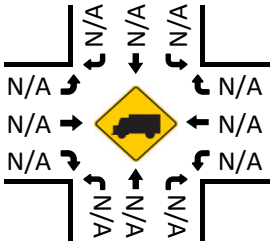

**HT (AM)**



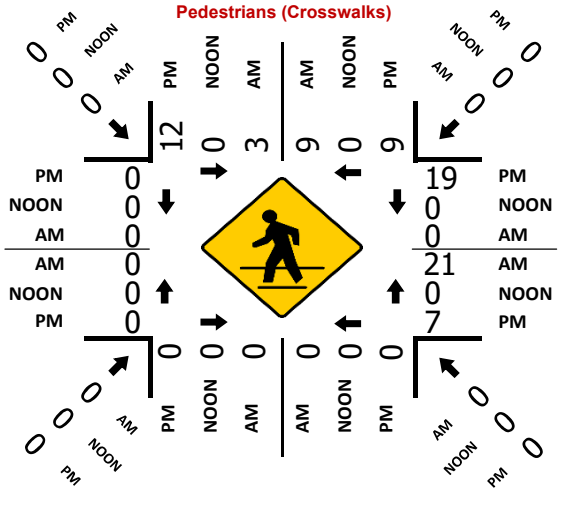

**Cars (NOON)**



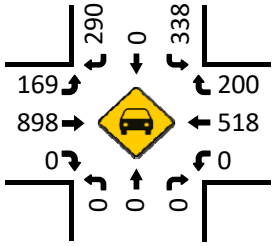

**HT (NOON)**



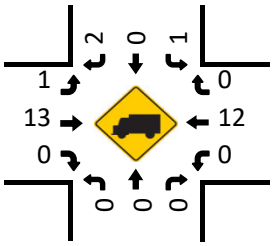

**Pedestrians (Crosswalks)**




**Cars (PM)**




**HT (PM)**



National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Universal Studios Blvd & Cahuenga Blvd
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-016
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Universal Studios Blvd | | | | Universal Studios Blvd | | | | Cahuenga Blvd | | | | Cahuenga Blvd | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 0 | 0 | 0 | 8 | 0 | 9 | 0 | 39 | 314 | 0 | 0 | 0 | 44 | 23 | 0 | 437 |
| 7:15 AM | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 55 | 370 | 0 | 0 | 0 | 39 | 23 | 0 | 507 |
| 7:30 AM | 0 | 0 | 0 | 0 | 13 | 0 | 12 | 0 | 73 | 389 | 0 | 0 | 0 | 41 | 28 | 0 | 556 |
| 7:45 AM | 0 | 0 | 0 | 0 | 16 | 0 | 15 | 0 | 74 | 423 | 0 | 0 | 0 | 52 | 33 | 0 | 613 |
| 8:00 AM | 0 | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 60 | 373 | 0 | 0 | 0 | 68 | 45 | 0 | 576 |
| 8:15 AM | 0 | 0 | 0 | 0 | 22 | 0 | 26 | 0 | 71 | 351 | 0 | 0 | 0 | 73 | 48 | 0 | 591 |
| 8:30 AM | 0 | 0 | 0 | 0 | 16 | 0 | 21 | 0 | 66 | 408 | 0 | 0 | 0 | 68 | 40 | 0 | 619 |
| 8:45 AM | 0 | 0 | 0 | 0 | 19 | 0 | 17 | 0 | 61 | 362 | 0 | 0 | 0 | 66 | 35 | 0 | 560 |
| 9:00 AM | 0 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 83 | 390 | 0 | 0 | 0 | 70 | 34 | 0 | 629 |
| 9:15 AM | 0 | 0 | 0 | 0 | 31 | 0 | 37 | 1 | 81 | 330 | 0 | 0 | 0 | 70 | 29 | 0 | 579 |
| 9:30 AM | 0 | 0 | 0 | 0 | 24 | 0 | 40 | 0 | 91 | 297 | 0 | 0 | 0 | 91 | 40 | 0 | 583 |
| 9:45 AM | 0 | 0 | 0 | 0 | 36 | 0 | 41 | 0 | 80 | 401 | 0 | 0 | 0 | 92 | 33 | 0 | 683 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 0 | 0 | 0 | 234 | 0 | 271 | 1 | 834 | 4408 | 0 | 0 | 0 | 774 | 411 | 0 | 6933 |
| **APPROACH %'s :** | | | | | 46.25% | 0.00% | 53.56% | 0.20% | 15.91% | 84.09% | 0.00% | 0.00% | 0.00% | 65.32% | 34.68% | 0.00% | |
| **PEAK HR :** | 09:00 AM - 10:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 0 | 0 | 0 | 117 | 0 | 144 | 1 | 335 | 1418 | 0 | 0 | 0 | 323 | 136 | 0 | 2474 |
| **PEAK HR FACTOR :** | 0.000 | 0.000 | 0.000 | 0.000 | 0.813 | 0.000 | 0.878 | 0.250 | 0.920 | 0.884 | 0.000 | 0.000 | 0.000 | 0.878 | 0.850 | 0.000 | 0.906 |
| | | | | | | | 0.851 | | | | 0.911 | | | | 0.876 | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 0 | 0 | 0 | 0 | 27 | 0 | 42 | 3 | 41 | 180 | 0 | 0 | 0 | 102 | 29 | 0 | 424 |
| 3:15 PM | 0 | 0 | 0 | 0 | 33 | 0 | 33 | 0 | 41 | 172 | 0 | 0 | 0 | 107 | 39 | 0 | 425 |
| 3:30 PM | 0 | 0 | 0 | 0 | 29 | 0 | 40 | 0 | 51 | 182 | 0 | 0 | 0 | 116 | 46 | 0 | 464 |
| 3:45 PM | 0 | 0 | 0 | 0 | 33 | 0 | 31 | 0 | 38 | 199 | 0 | 0 | 0 | 119 | 46 | 0 | 466 |
| 4:00 PM | 0 | 0 | 0 | 0 | 36 | 0 | 42 | 1 | 36 | 190 | 0 | 0 | 0 | 160 | 48 | 0 | 513 |
| 4:15 PM | 0 | 0 | 0 | 0 | 58 | 0 | 34 | 1 | 29 | 173 | 0 | 0 | 0 | 142 | 42 | 0 | 479 |
| 4:30 PM | 0 | 0 | 0 | 0 | 48 | 0 | 42 | 2 | 51 | 185 | 0 | 0 | 0 | 146 | 42 | 0 | 516 |
| 4:45 PM | 0 | 0 | 0 | 0 | 50 | 0 | 59 | 1 | 50 | 184 | 0 | 0 | 0 | 155 | 41 | 0 | 540 |
| 5:00 PM | 0 | 0 | 0 | 0 | 65 | 0 | 81 | 0 | 40 | 202 | 0 | 0 | 0 | 130 | 52 | 0 | 570 |
| 5:15 PM | 0 | 0 | 0 | 0 | 70 | 0 | 66 | 1 | 40 | 222 | 0 | 0 | 0 | 135 | 50 | 0 | 584 |
| 5:30 PM | 0 | 0 | 0 | 0 | 95 | 0 | 71 | 0 | 37 | 242 | 0 | 0 | 0 | 125 | 61 | 0 | 631 |
| 5:45 PM | 0 | 0 | 0 | 0 | 109 | 0 | 74 | 0 | 53 | 246 | 0 | 0 | 0 | 142 | 37 | 0 | 661 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 0 | 0 | 0 | 653 | 0 | 615 | 9 | 507 | 2377 | 0 | 0 | 0 | 1579 | 533 | 0 | 6273 |
| **APPROACH %'s :** | | | | | 51.14% | 0.00% | 48.16% | 0.70% | 17.58% | 82.42% | 0.00% | 0.00% | 0.00% | 74.76% | 25.24% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 0 | 0 | 0 | 339 | 0 | 292 | 1 | 170 | 912 | 0 | 0 | 0 | 532 | 200 | 0 | 2446 |
| **PEAK HR FACTOR :** | 0.000 | 0.000 | 0.000 | 0.000 | 0.778 | 0.000 | 0.901 | 0.250 | 0.802 | 0.927 | 0.000 | 0.000 | 0.000 | 0.937 | 0.820 | 0.000 | 0.925 |
| | | | | | | | 0.863 | | | | 0.905 | | | | 0.984 | | |

City Of Los Angeles
Department Of Transportation

# MANUAL TRAFFIC COUNT SUMMARY

STREET:
**North/South** Barham Blvd

**East/West** W.C. Fields Dr/Cahuenga Blvd

Day: Tuesday Date: 09/25/2018 Weather: SUNNY

Hours: Chekrs: NDS

School Day: Yes I/S CODE

| | N/B | S/B | E/B | W/B |
|---|---|---|---|---|
| **DUAL-WHEELED** | 52 | 157 | 0 | 119 |
| **BIKES** | 6 | 8 | 0 | 7 |
| **BUSES** | 0 | 7 | 0 | 14 |

| | N/B | TIME | S/B | TIME | E/B | TIME | W/B | TIME |
|---|---|---|---|---|---|---|---|---|
| *AM PK 15 MIN* | 217 | 8.45 | 607 | 9.30 | 0 | 0.00 | 536 | 8.30 |
| *PM PK 15 MIN* | 183 | 15.30 | 543 | 16.30 | 0 | 0.00 | 585 | 17.15 |
| *AM PK HOUR* | 789 | 8.30 | 2352 | 8.00 | 0 | 0.00 | 2048 | 8.15 |
| *PM PK HOUR* | 672 | 15.30 | 2108 | 16.30 | 0 | 0.00 | 2286 | 16.30 |

**NORTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 404 | 0 | 404 |
| *8-9* | 0 | 704 | 0 | 704 |
| *9-10* | 0 | 675 | 0 | 675 |
| *15-16* | 0 | 621 | 0 | 621 |
| *16-17* | 0 | 667 | 0 | 667 |
| *17-18* | 0 | 662 | 0 | 662 |
| TOTAL | 0 | 3733 | 0 | 3733 |

**SOUTHBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 1963 | 77 | 2040 |
| *8-9* | 0 | 2201 | 151 | 2352 |
| *9-10* | 0 | 1976 | 281 | 2257 |
| *15-16* | 1 | 1593 | 204 | 1798 |
| *16-17* | 0 | 1826 | 230 | 2056 |
| *17-18* | 0 | 1931 | 171 | 2102 |
| TOTAL | 1 | 11490 | 1114 | 12605 |

| **TOTAL** | **XING S/L** | | **XING N/L** | |
|---|---|---|---|---|
| N-S | Ped | Sch | Ped | Sch |
| 2444 | 2 | 0 | 1 | 0 |
| 3056 | 1 | 0 | 0 | 0 |
| 2932 | 1 | 0 | 0 | 0 |
| 2419 | 2 | 0 | 0 | 0 |
| 2723 | 4 | 0 | 0 | 0 |
| 2764 | 1 | 0 | 0 | 0 |
| 16338 | 11 | 0 | 1 | 0 |

**EASTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 0 | 0 | 0 | 0 |
| *8-9* | 0 | 0 | 0 | 0 |
| *9-10* | 0 | 0 | 0 | 0 |
| *15-16* | 0 | 0 | 0 | 0 |
| *16-17* | 0 | 0 | 0 | 0 |
| *17-18* | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 |

**WESTBOUND Approach**

| Hours | Lt | Th | Rt | Total |
|---|---|---|---|---|
| *7-8* | 130 | 94 | 1246 | 1470 |
| *8-9* | 160 | 100 | 1739 | 1999 |
| *9-10* | 194 | 124 | 1613 | 1931 |
| *15-16* | 183 | 320 | 1393 | 1896 |
| *16-17* | 206 | 393 | 1650 | 2249 |
| *17-18* | 203 | 311 | 1747 | 2261 |
| TOTAL | 1076 | 1342 | 9388 | 11806 |

| **TOTAL** | **XING W/L** | | **XING E/L** | |
|---|---|---|---|---|
| E-W | Ped | Sch | Ped | Sch |
| 1470 | 1 | 0 | 2 | 0 |
| 1999 | 4 | 0 | 1 | 0 |
| 1931 | 8 | 0 | 6 | 0 |
| 1896 | 3 | 0 | 7 | 0 |
| 2249 | 0 | 0 | 5 | 0 |
| 2261 | 1 | 0 | 7 | 0 |
| 11806 | 17 | 0 | 28 | 0 |

Prepared by National Data & Surveying Services

# Barham Blvd & W.C. Fields Dr/Cahuenga Blvd

## Peak Hour Turning Movement Count

**ID:** 18-05609-018
**City:** Los Angeles

**Day:** Tuesday
**Date:** 09/25/2018

| | PEAK HOURS | COUNT PERIODS |
|---|---|---|
| AM | 08:15 AM - 09:15 AM | 07:00 AM - 10:00 AM |
| NOON | NONE | NONE |
| PM | 04:30 PM - 05:30 PM | 03:00 PM - 06:00 PM |

### Barham Blvd — SOUTHBOUND

| | Right | Through | Left | U-Turn | Opposite |
|---|---|---|---|---|---|
| AM | 192 | 2138 | 0 | 0 | 2523 |
| NOON | 0 | 0 | 0 | 0 | 0 |
| PM | 194 | 1914 | 0 | 0 | 2379 |
| | 1 | 3 | 0 | 0 | |

### W.C. Fields Dr/Cahuenga Blvd — WESTBOUND

| | | PM | NOON | AM |
|---|---|---|---|---|
| Right | 2 | 1733 | 0 | 1764 |
| Through | 0.52 | 343 | 0 | 107 |
| Left | 0.5 | 210 | 0 | 177 |
| U-Turn | 0 | 0 | 0 | 0 |
| Opposite | | 0 | 0 | 0 |

### W.C. Fields Dr/Cahuenga Blvd — EASTBOUND

| | AM | NOON | PM | |
|---|---|---|---|---|
| Opposite | 299 | 0 | 537 | |
| U-Turn | 0 | 0 | 0 | 0 |
| Left | 0 | 0 | 0 | 0 |
| Through | 0 | 0 | 0 | 0 |
| Right | 0 | 0 | 0 | 0 |

### Barham Blvd — NORTHBOUND

| | Opposite | U-Turn | Left | Through | Right |
|---|---|---|---|---|---|
| | | 0 | 0 | 2 | 0 |
| PM | 2124 | 0 | 0 | 646 | 0 |
| NOON | 0 | 0 | 0 | 0 | 0 |
| AM | 2315 | 0 | 0 | 759 | 0 |

### CONTROL

Signalized

| | AM | NOON | PM |
|---|---|---|---|
| TEV | 5137 | 0 | 5040 |
| PHF | 0.99 | | 0.99 |

### Cars (AM)

| Approach | Left | Through | Right | U-Turn |
|---|---|---|---|---|
| Southbound | 0 | 2107 | 190 | |
| Westbound | 175 | 106 | 1747 | |
| Eastbound | 0 | 0 | 0 | |
| Northbound | 0 | 749 | 0 | |

### HT (AM)

| Approach | Left | Through | Right |
|---|---|---|---|
| Southbound | 0 | 30 | 2 |
| Westbound | 1 | 1 | 16 |
| Eastbound | 0 | 0 | 0 |
| Northbound | 0 | 10 | 0 |

### Cars (NOON)

| Approach | Left | Through | Right |
|---|---|---|---|
| Southbound | N/A | N/A | N/A |
| Westbound | N/A | N/A | N/A |
| Eastbound | N/A | N/A | N/A |
| Northbound | N/A | N/A | N/A |

### HT (NOON)

| Approach | Left | Through | Right |
|---|---|---|---|
| Southbound | N/A | N/A | N/A |
| Westbound | N/A | N/A | N/A |
| Eastbound | N/A | N/A | N/A |
| Northbound | N/A | N/A | N/A |

### Cars (PM)

| Approach | Left | Through | Right |
|---|---|---|---|
| Southbound | 0 | 1896 | 190 |
| Westbound | 209 | 339 | 1713 |
| Eastbound | 0 | 0 | 0 |
| Northbound | 0 | 637 | 0 |

### HT (PM)

| Approach | Left | Through | Right |
|---|---|---|---|
| Southbound | 0 | 16 | 4 |
| Westbound | 0 | 4 | 19 |
| Eastbound | 0 | 0 | 0 |
| Northbound | 0 | 9 | 0 |

### Pedestrians (Crosswalks)

| Crosswalk | Direction | AM | NOON | PM |
|---|---|---|---|---|
| North | Eastbound | 0 | 0 | 0 |
| North | Westbound | 0 | 0 | 0 |
| West | Southbound | 4 | 0 | 0 |
| West | Northbound | 0 | 0 | 0 |
| East | Southbound | 2 | 0 | 6 |
| East | Northbound | 0 | 0 | 1 |
| South | Eastbound | 0 | 0 | 0 |
| South | Westbound | 1 | 0 | 2 |
| Diagonals (all four) | | 0 | 0 | 0 |

National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Barham Blvd & W.C. Fields Dr/Cahuenga Blvd
**City:** Los Angeles
**Control:** Signalized

**Project ID:** 18-05609-018
**Date:** 9/25/2018

**Total**

| NS/EW Streets: | Barham Blvd | | | | Barham Blvd | | | | W.C. Fields Dr/Cahuenga Blvd | | | | W.C. Fields Dr/Cahuenga Blvd | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.52 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 0 | 77 | 0 | 0 | 0 | 484 | 16 | 0 | 0 | 0 | 0 | 0 | 13 | 17 | 225 | 0 | 832 |
| 7:15 AM | 0 | 104 | 0 | 0 | 0 | 525 | 13 | 0 | 0 | 0 | 0 | 0 | 32 | 20 | 283 | 0 | 977 |
| 7:30 AM | 0 | 99 | 0 | 0 | 0 | 421 | 22 | 0 | 0 | 0 | 0 | 0 | 40 | 30 | 324 | 0 | 936 |
| 7:45 AM | 0 | 124 | 0 | 0 | 0 | 533 | 26 | 0 | 0 | 0 | 0 | 0 | 45 | 27 | 414 | 0 | 1169 |
| 8:00 AM | 0 | 149 | 0 | 0 | 0 | 578 | 26 | 0 | 0 | 0 | 0 | 0 | 35 | 24 | 395 | 0 | 1207 |
| 8:15 AM | 0 | 155 | 0 | 0 | 0 | 558 | 37 | 0 | 0 | 0 | 0 | 0 | 38 | 27 | 455 | 0 | 1270 |
| 8:30 AM | 0 | 183 | 0 | 0 | 0 | 539 | 44 | 0 | 0 | 0 | 0 | 0 | 52 | 21 | 463 | 0 | 1302 |
| 8:45 AM | 0 | 217 | 0 | 0 | 0 | 526 | 44 | 0 | 0 | 0 | 0 | 0 | 35 | 28 | 426 | 0 | 1276 |
| 9:00 AM | 0 | 204 | 0 | 0 | 0 | 515 | 67 | 0 | 0 | 0 | 0 | 0 | 52 | 31 | 420 | 0 | 1289 |
| 9:15 AM | 0 | 185 | 0 | 0 | 0 | 509 | 60 | 0 | 0 | 0 | 0 | 0 | 51 | 42 | 418 | 0 | 1265 |
| 9:30 AM | 0 | 154 | 0 | 0 | 0 | 533 | 74 | 0 | 0 | 0 | 0 | 0 | 43 | 24 | 397 | 0 | 1225 |
| 9:45 AM | 0 | 132 | 0 | 0 | 0 | 419 | 80 | 0 | 0 | 0 | 0 | 0 | 48 | 27 | 378 | 0 | 1084 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 1783 | 0 | 0 | 0 | 6140 | 509 | 0 | 0 | 0 | 0 | 0 | 484 | 318 | 4598 | 0 | 13832 |
| **APPROACH %'s :** | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 92.34% | 7.66% | 0.00% | | | | | 8.96% | 5.89% | 85.15% | 0.00% | |
| **PEAK HR :** | 08:15 AM - 09:15 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 759 | 0 | 0 | 0 | 2138 | 192 | 0 | 0 | 0 | 0 | 0 | 177 | 107 | 1764 | 0 | 5137 |
| **PEAK HR FACTOR :** | 0.000 | 0.874 | 0.000 | 0.000 | 0.000 | 0.958 | 0.716 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.851 | 0.863 | 0.952 | 0.000 | 0.986 |
| | | 0.874 | | | | 0.979 | | | | | | | | 0.955 | | | |

| PM | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.52 | 2 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 3:00 PM | 0 | 136 | 0 | 0 | 0 | 364 | 49 | 0 | 0 | 0 | 0 | 0 | 51 | 47 | 341 | 0 | 988 |
| 3:15 PM | 0 | 154 | 0 | 0 | 0 | 411 | 53 | 0 | 0 | 0 | 0 | 0 | 36 | 74 | 325 | 0 | 1053 |
| 3:30 PM | 0 | 183 | 0 | 0 | 0 | 412 | 54 | 1 | 0 | 0 | 0 | 0 | 40 | 89 | 370 | 0 | 1149 |
| 3:45 PM | 0 | 148 | 0 | 0 | 0 | 406 | 48 | 0 | 0 | 0 | 0 | 0 | 56 | 110 | 357 | 0 | 1125 |
| 4:00 PM | 0 | 175 | 0 | 0 | 0 | 450 | 57 | 0 | 0 | 0 | 0 | 0 | 46 | 101 | 391 | 0 | 1220 |
| 4:15 PM | 0 | 166 | 0 | 0 | 0 | 435 | 56 | 0 | 0 | 0 | 0 | 0 | 50 | 99 | 396 | 0 | 1202 |
| 4:30 PM | 0 | 150 | 0 | 0 | 0 | 490 | 53 | 0 | 0 | 0 | 0 | 0 | 61 | 98 | 423 | 0 | 1275 |
| 4:45 PM | 0 | 176 | 0 | 0 | 0 | 451 | 64 | 0 | 0 | 0 | 0 | 0 | 49 | 95 | 440 | 0 | 1275 |
| 5:00 PM | 0 | 160 | 0 | 0 | 0 | 475 | 41 | 0 | 0 | 0 | 0 | 0 | 43 | 74 | 418 | 0 | 1211 |
| 5:15 PM | 0 | 160 | 0 | 0 | 0 | 498 | 36 | 0 | 0 | 0 | 0 | 0 | 57 | 76 | 452 | 0 | 1279 |
| 5:30 PM | 0 | 161 | 0 | 0 | 0 | 465 | 47 | 0 | 0 | 0 | 0 | 0 | 48 | 78 | 445 | 0 | 1244 |
| 5:45 PM | 0 | 181 | 0 | 0 | 0 | 493 | 47 | 0 | 0 | 0 | 0 | 0 | 55 | 83 | 432 | 0 | 1291 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 0 | 1950 | 0 | 0 | 0 | 5350 | 605 | 1 | 0 | 0 | 0 | 0 | 592 | 1024 | 4790 | 0 | 14312 |
| **APPROACH %'s :** | 0.00% | 100.00% | 0.00% | 0.00% | 0.00% | 89.83% | 10.16% | 0.02% | | | | | 9.24% | 15.99% | 74.77% | 0.00% | |
| **PEAK HR :** | 04:30 PM - 05:30 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 646 | 0 | 0 | 0 | 1914 | 194 | 0 | 0 | 0 | 0 | 0 | 210 | 343 | 1733 | 0 | 5040 |
| **PEAK HR FACTOR :** | 0.000 | 0.918 | 0.000 | 0.000 | 0.000 | 0.961 | 0.758 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.861 | 0.875 | 0.959 | 0.000 | 0.985 |
| | | 0.918 | | | | 0.971 | | | | | | | | 0.977 | | | |

# APPENDIX D

## DETAILED PLANS, PROGRAMS, ORDINANCES, AND POLICIES REVIEW

# 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. ☐ Yes ☐ No ☒ N/A

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?

☐ **Yes** ☐ **No** ☒ 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 _____Required_____Proposed_____

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**.[1]

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility 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 off-site street loading areas.*
>
> **Mobility Plan 2035 Street Designations and Standard Roadway Dimensions**

[1] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

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 off-site 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[2] 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

☐ **Yes** ☒ No

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**.[3]

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?

☐ **Yes** ☐ No ☒ N/A

[2] 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.

[3] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

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-of-way.*

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** ☒ 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?

☐ Yes ☒ No

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** ☒ N/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 off-street 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[4] 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** ☒ 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?

☒ Yes ☐ **No**

[4] 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?

[x] 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?

[x] Yes [ ] **No** [ ] N/A

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?

[x] Yes [ ] No

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

[ ] Yes [x] No [ ] N/A

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

[ ] Yes [ ] No [x] 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 Citywide Design Guidelines. https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-20618eec5049/Citywide_Design_Guidelines.pdf

LADOT Transportation Assessment Support Map https://arcg.is/fubbD

Mobility Plan 2035 https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf

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

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

The Transportation Element of the City's General Plan, Mobility Plan 2035, 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 Plan for A Healthy Los Angeles (March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety.

The City of Los Angeles Community Plans, which make up the Land Use Element of the City's General Plan, 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 Vision Zero 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 Vision Zero Corridor Plans 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 Citywide Design Guidelines (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 Transportation Demand Management (TDM) Ordinance (LA Municipal Code 12.26.J) 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 LAMC Section 12.37 (Waivers of Dedication and Improvement) 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) Street Standard Dimensions S-470-1 provides the specific street widths and public right of way dimensions associated with the City's street standards.

# Detailed Responses in Support of General Consistency with Transportation-Related Plans, Programs, Ordinances, or Policies (Adapted from Attachment D in *LADOT Transportation Assessment Guidelines*, July 2020)

The items below correspond with the TAG Attachment D: Plan, Policy, and Program Consistency Worksheet. Defined terms below have the same meanings as in the Transportation Assessment.

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

The Project does not 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. The Project involves construction along Universal Hollywood Drive and Hotel Drive. Universal Hollywood Drive is designated as a Private Street under the MP 2035 Street Standards Plan. Hotel Drive is a Private Drive within the County of Los Angeles's Universal Studios Specific Plan and is not included within the MP 2035 Street Standards Plan. While Hotel Drive is a Private Drive, trips bound to and from the Project Site have the legal ability to utilize Hotel Drive. The Project Site has three zoning designations per LAMC: C2-1, PB-1, and RE15-1-H. The Project is not required to and is not proposing to make any modifications to the public right-of-way. The Project Site is not along any of the networks identified within MP 2035. Therefore, the Project does not conflict with any dedication and improvement requirements that are needed to comply with the MP 2035 Street Designation and Standard Roadway Dimensions requirements.

*MP 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.*

- The Project is not required to make any dedications or improvements to the public right-of way. The Project will not alter adjacent streets or the right-of-way in a manner that would preclude or conflict future changes by various City Departments.

*MP 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.*

- The Project is not required to make any changes within the public right-of-way and will not alter pedestrian infrastructure or the right-of-way in a manner that would preclude or conflict future changes by various City Departments. The Project prioritizes pedestrian access and connectivity. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will provide an enhanced connection between the Project Site and the Coral Drive skybridge, which leads directly to Universal Studios Hollywood and Universal CityWalk. Furthermore, the Hilton Driveway approach to Universal Hollywood Drive is improved with a crosswalk, as well as ADA curb ramps with yellow truncated domes.

*MP 2035 Policy 3.2 – People with Disabilities. Accommodate the needs of people with disabilities when modifying of installing infrastructure within the public right-of-way.*

- The Project is not required to make any changes within the public right-of-way and will not alter existing ADA infrastructure or the right-of-way in a manner that would preclude or conflict future changes by various City Departments. The Hilton Driveway approach to Universal Hollywood Drive is improved with a crosswalk, as well as ADA curb ramps with yellow truncated domes.

## B. MOBILITY PLAN 2035 (MP 2035) PROW POLICY ALIGNMENT WITH PROJECT-INITIATED CHANGES

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

The Project will not physically modify the curb placement or turning radius, nor does it physically alter the sidewalk and parkways space, in a manner that would change how people access the Project Site. The Project will not make any physical changes to the public right of way and complies with the MP 2035 policies outlined below.

*MP 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.*

- The Project is not proposing to make any dedications or improvements to the public right-of way. The Project will not alter adjacent streets or the right-of-way in a manner that would preclude or conflict future changes by various City Departments.

*MP 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.*

- The Project is not proposing to make any changes within the public right-of-way and will not alter pedestrian infrastructure or the right-of-way in a manner that would preclude or conflict future changes by various City Departments. The Project prioritizes pedestrian access and connectivity. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will provide an enhanced connection between the Project Site and the Coral Drive skybridge, which leads directly to Universal Studios Hollywood and Universal CityWalk. Furthermore, the Hilton Driveway approach to Universal Hollywood Drive is improved with a crosswalk, as well as ADA curb ramps with yellow truncated domes.

*MP 2035 Policy 3.2 – People with Disabilities. Accommodate the needs of people with disabilities when modifying of installing infrastructure within the public right-of-way.*

- The Project is not proposing to make any changes within the public right-of-way and will not alter existing ADA infrastructure or the right-of-way in a manner that would preclude

or conflict future changes by various City Departments. The Hilton Driveway approach to Universal Hollywood Drive is improved with a crosswalk, as well as ADA curb ramps with yellow truncated domes.

*MP 2035 Policy 2.10 – Loading Areas. Facilitate the provision of on and off-site street loading areas.*

- All loading activities will continue to occur off-street and internal to the Project Site. Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Ancillary Hotel Building, similar to existing conditions. The loading dock will continue to be accessed by the service road along the east side of the Project Site.

*MP 2035 Street Designations and Standard Roadway Dimensions*

- Universal Hollywood Drive is designated as a Private Street under MP 2035, and therefore, standard roadway dimensions have not been designated. Hotel Drive is a Private Drive within the County of Los Angeles's Universal Studios Specific Plan and is not included within the MP 2035 Street Standards Plan.

### B.2. Driveway Access

The Project does not add new driveways along a street designated as an Avenue or a Boulevard, therefore, the Project does not conflict with LADOT Manual of Policy and Procedures (MPP), Section 321, Driveway Design. Vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive. It is noted that Universal Hollywood Drive is designated as a Private Street under the MP 2035 Street Standards Plan. No additional driveways along the public right-of-way are proposed as part of the Project. The existing driveway is located approximately 150 feet north of the signalized Universal Hollywood Drive – Coral Drive / Hotel Drive intersection. Furthermore, the Project will not require the relocation of any existing pedestrian infrastructure. Therefore, the Project does not conflict with a plan or policies that govern the public right of way as a result of any Project-initiated changes to the public right-of-way.

*MP 2035 Policy 2.10 – Loading Areas. Facilitate the provision of on and off-site street loading areas.*

- All loading activities will continue to occur off-street and internal to the Project Site. Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Ancillary Hotel Building, similar to existing conditions. The loading dock will continue to be accessed by the service road along the east side of the Project Site.

*MP 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.*

- Driveway access to the Project Site is provided from Universal Hollywood Drive, a Private Street. The Existing Hotel and Project are set back from the street 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, in accordance with the Site Planning Best Practices listed below.*

- *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.*

    - The Project prioritizes pedestrian access first. Vehicular access to the Project Site's existing parking garage, which will be expanded as part of the Project, is provided internal to the Project Site and away from the public right-of way. The Project Site is not located on a corner lot. Furthermore, a pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will provide an enhanced connection between the Project Site and the Coral Drive skybridge, which leads directly to Universal Studios Hollywood and Universal CityWalk.

- *Minimize both the number of driveway entrances and overall driveway widths.*

    - The existing curb cut along Universal Hollywood Drive will be maintained. The Project does not propose the addition of new curb cuts along the public right-of-way.

- *Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.*

    - Drop-off/pick-up areas will be located internal to the Project Site and away from the public right-of-way. Hotel guests and visitors choosing to utilize the Hotel's valet service will drop-off their vehicles at the valet area on Level 1. Guests to the Hotel's existing conference center or Junior Ballroom will utilize a new valet station at Level 2 of the existing parking garage. The existing banquet entrance at the west façade of the Ancillary Hotel Building will become a rideshare (i.e., Uber/Lyft, airport shuttle, etc.) pick-up/drop-off location.

- *Orient vehicular access as far from street intersections as possible.*

    - The existing curb cut along Universal Hollywood Drive is located midblock, and away from nearby intersections. Specifically, the Universal Hollywood Drive – Coral Drive / Hotel Drive intersection is located approximately 150 feet south of the existing Hilton Driveway curb cut. The Sheraton Drive / Universal Hollywood Drive intersection is located approximately 400 feet northwest of the existing Hilton Driveway curb cut.

- *Place drive-through elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).*

    - The Project does not propose any drive-through elements.

- *Ensure that loading areas do not interfere with onsite pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.*

    - Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Ancillary Hotel Building, and away from onsite pedestrian and vehicular circulation. The loading dock will continue to be accessed by the service road along the east side of the Project Site. The service road and loading dock are located away from areas that are used for public parking and public entrances,

## C. NETWORK ACCESS

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

The Project does not conflict with MP 2035 policy below because it will not vacate or otherwise restrict public access to a street, alley or public stairway.

*MP 2035 Policy 3.9 – Increased Network Access. Discourage the vacation of public rights-of-way.*

- The Project will not vacate any public rights-of-way.

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

The Project does not conflict with the MP 2035 policy below because it will not create a cul-de-sac, nor is the Project located adjacent to an existing cul-de-sac.

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

- The Project Site is not located on a cul-de-sac.

### D. PARKING SUPPLY AND TRANSPORTATION DEMAND MANAGEMENT

The Project is consistent with the MP 2035 polices below because it does not propose a supply of onsite parking that would exceed the baseline amount as required in the LAMC or a Specific Plan. Per LAMC, the Project is required to provide 408 additional vehicle parking spaces. The Project will provide the required number of vehicle parking spaces. The Project will also provide the required bicycle parking spaces that are required by LAMC Section 12.21A.16.

In addition, the Project includes the construction of more than 25,000 square feet of new non-residential gross floor area. As required by the City's TDM Ordinance in LAMC Section 12.26J, the Project will continue to provide a bulletin board, display case, or kiosk (displaying transportation information) where the greatest number or employees are likely to see it. The information displayed will include, but is not limited to, current routes and schedules for public transit serving the Project Site, contact information for regional ridesharing and transit agencies, ridesharing promotional material, regional and local bicycle route and facility information, and a listing of onsite services or facilities which are available for carpoolers, vanpoolers, bicyclists, and transit riders.

In addition to utilizing promotional and marketing materials to educate and inform employees about alternative transportation options and the effects of their travel choices, the Project will utilize additional TDM strategies as described in Section 2.10 of the Transportation Assessment. The Project will offer all employees a daily transit subsidy of $1.49 to encourage travel to and from the Project Site by public transit. Additionally, the Project will provide bicycle parking per LAMC requirements, and provide secure bicycle parking and showers and changing rooms for employees commuting to work by bicycle.

Therefore, the Project does not conflict the LAMC vehicle and bicycle parking requirements or the City's TDM measures.

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

- The Project is required to provide 40 short-term and 33 long-term bicycle parking spaces in accordance with LAMC. The Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces. Secure bicycle parking will be provided within the onsite parking garage. Additionally, the Project will provide showers and changing rooms for employees commuting to work by bicycle.

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

- As described in Section 2.10 of the Transportation Assessment, the Project will utilize four TDM strategies as Project Design Features: Transit Subsidies; Promotions and Marketing;

Include Bicycle Parking per the LAMC; and Include Secure Bike Parking and Showers. The Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J).

*MP 2035 Policy 4.13 – Parking and Land Use Management. Balance on-street and off-street parking supply with other transportation and land use objectives.*

- The Project will provide a total of 408 new vehicle parking spaces, and a total of 1,060 vehicle parking spaces will be provided onsite upon completion of the Project. The Project Site will continue to provide vehicle parking spaces in accordance with the LAMC. Additionally, the Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces. Moreover, the Project is located in a Transit Priority Area, and is within convenient walking distance to public transit routes along Lankershim Boulevard, including the Metro B Line (Red).

### E. CONSISTENCY WITH REGIONAL PLANS

The Project applies one of the City's efficiency-based impact thresholds (i.e., VMT per Employee) as discussed in Section 4.2 of the Transportation Assessment. The Project's VMT analysis concludes that the Project will not result in a significant VMT impact. As the Project will not result in a significant VMT impact, the Project is shown to be consistent with the VMT and greenhouse gas (GHG) goals of the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

## Additional Review

The following provides a review of the transportation-related goals listed in the Plan for a Healthy Los Angeles (Healthy LA).

- The Project supports the transportation-related goals listed in Healthy LA. The Project is designed in a manner that facilitates travel on foot between the Project Site and the nearby Universal Studios Hollywood and Universal CityWalk attractions. The Project will provide the LAMC-required number of bicycle parking spaces and will include end-of-trip facilities for use by employees. To reduce dependence on single-occupancy vehicles, all employees will be offered a daily transit subsidy of $1.49 to encourage travel to and from the Project Site by means other than vehicles. The Project would not conflict with, limit or preclude the City's ability to implement programs and policies in furtherance of Healthy LA.

The following provides a review of relevant policies within the LADOT MPP.

- The LADOT MPP, Section 321, Driveway Design, includes driveway design standards to minimize adverse effects on street traffic. The Project Site has frontage along Universal Hollywood Drive, which is designated as a Private Street under the MP 2035 Street

Standards Plan, and Hotel Drive, a Private Drive within the County of Los Angeles's Universal Studios Specific Plan that is not included within the MP 2035 Street Standards Plan. Vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive. It is noted that Universal Hollywood Drive is designated as a Private Street under the MP 2035 Street Standards Plan. No additional driveways along the public right-of-way are proposed as part of the Project. While LADOT MPP, Section 321 does not provide guidance for driveway placement along Private Streets, it is noted that the existing driveway is located approximately 150 feet north of the signalized Universal Hollywood Drive – Coral Drive / Hotel Drive intersection. However, LADOT MPP, Section 321 states that on a street classified as a Collector or Local, driveways should not be placed within 75 feet of the adjacent street (for a project with frontage greater than 250 feet). The Project would comply with this requirement so as to not adversely affect traffic at the nearby Universal Hollywood Drive – Coral Drive / Hotel Drive intersection. The Project would not conflict with the LADOT MPP.

The following provides a review of Vision Zero.

- Vision Zero is a plan that strives to eliminate traffic-related deaths in Los Angeles by 2025 through strategies, such as modifying streets to better serve vulnerable road users. Projects located in the HIN should make improvements or fund them. Universal Hollywood Drive or other roadways within the immediate vicinity of the Project Site are located within the HIN. The Project would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way along Universal Hollywood Drive or other roadways within the immediate vicinity of the Project Site.

The following provides a review of the Mobility Hubs Reader's Guide.

- The Mobility Hubs Reader's Guide specifically focuses on enhancing bicycle connections, providing vehicle sharing services, improving bus infrastructure, providing real-time transit and wayfinding information, and enhancing walkability and pedestrian connections. The Project would incorporate several components, including LAMC-required short-term and long-term bicycle parking that both facilitates and encourages employees to bicycle to and from the Project Site. Additionally, the Project will provide showers and changing rooms for employees commuting to work by bicycle. Further, as part of the Project's TDM program, the Project would support strategies to encourage public transit such as offering all employees a daily transit subsidy of $1.49 to encourage travel by public transit to and from the Project Site, and utilizing promotional and marketing tools to educate and inform employees about alternative transportation options and the effects of their travel choices. promotion on available transit options. Lastly, a pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will provide an enhanced connection between the Project Site and the Coral Drive skybridge, which leads directly to Universal Studios Hollywood and Universal CityWalk. The Project would not conflict with the Mobility Hubs Reader's Guide.

The following provides a review of the City's Walkability Checklist.

- The Project would result in the retention of all sidewalks and curb ramps along the Project Site's Universal Hollywood Drive frontage. The Project will not add additional curb cuts along the public right-of-way in order to provide a safe pedestrian connection between the Project Site and the nearby Universal Studios Hollywood and Universal CityWalk attractions. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will provide an enhanced connection between the Project Site and the Coral Drive skybridge, which leads directly to Universal Studios Hollywood and Universal CityWalk. These features support the Walkability Checklist recommendations and serve to enhance the pedestrian experience. The Project would not conflict with the Walkability Checklist.

The following provides a review of the transportation-related goals listed in the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Community Plan ("Community Plan"). The Community Plan was adopted in 1998. While an updated Community Plan is currently under development, the plan from 1998 is currently in effect and forms the basis for this review of potential conflicts relating to the transportation system.

From a transportation perspective, the Community Plan offers the following goals and objectives related to the Project.

*Objective 10-2: To increase the work trips and non-work trips made on public transit.*

- The Project is located in a Transit Priority Area and is within convenient walking distance to many public transit lines along Lankershim Boulevard. The Project will offer all employees a daily transit subsidy of $1.49 to encourage travel to and from the Project Site by public transit.

*Goal 11: Encourage alternative modes of transportation to the use of single occupancy vehicles (SOV) in order to reduce vehicle trips.*

- As described in Section 2.10 of the Transportation Assessment, the Project will utilize four TDM strategies as Project Design Features: Transit Subsidies; Promotions and Marketing; Include Bicycle Parking per the LAMC; and Include Secure Bike Parking and Showers. The Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J). Further, the Project is within convenient walking distance to Universal Studios Hollywood and Universal CityWalk. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to these nearby attractions.

*Objective 11-1: To pursue transportation management strategies that can maximize vehicle occupancy, minimize average trip length, and reduce the number of vehicle trips.*

- As described in Section 2.10 of the Transportation Assessment, the Project will utilize four TDM strategies as Project Design Features: Transit Subsidies; Promotions and Marketing; Include Bicycle Parking per the LAMC; and Include Secure Bike Parking and Showers. The Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J). Further, the Project is within convenient walking distance to Universal Studios Hollywood and Universal CityWalk. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to these nearby attractions. It is also noted that the Project will generate 512 fewer daily vehicle trips as a result of the implementation of the four TDM strategies described above. Additionally, the estimated Daily Work VMT per Employee is 8.7 Daily Work VMT per Employee, which is less than the South Valley APC significance threshold of 11.6 Daily Work VMT per Employee.

*Policy 11-1.1: Encourage non-residential development to provide employee incentives for utilizing alternatives to the automobile (i.e., carpools, vanpools, buses, flex time, walking, bicycles, etc.).*

- As described in Section 2.10 of the Transportation Assessment, the Project will utilize four TDM strategies as Project Design Features: Transit Subsidies; Promotions and Marketing; Include Bicycle Parking per the LAMC; and Include Secure Bike Parking and Showers. The Applicant will comply with existing applicable City ordinances (e.g., the City's existing TDM Ordinance, referred to in LAMC Section 12.26.J). Further, the Project is within convenient walking distance to Universal Studios Hollywood and Universal CityWalk. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to these nearby attractions.

*Policy 13-1.4: New development projects should be designed to minimize disturbance to existing flow with proper ingress and egress to parking.*

- Existing vehicular access to the Project Site will be maintained, and existing traffic flow will not be disturbed.

*Goal 14: A system of safe, efficient, and attractive bicycle, pedestrian, and equestrian facilities.*

- The Project will provide bicycle parking per the LAMC and will also provide secure bicycle parking and showers and changing rooms for employees commuting to work by bicycle. The Project proposes no changes along the public right-of-way, and the existing public pedestrian facilities along Universal Hollywood Drive will be maintained. A

pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to the nearby Universal Studios Hollywood and Universal CityWalk attractions.

*Objective 14-1: To promote an adequate system of safe bikeways for commuter, school, and recreational use.*

- The Project will promote bicycling as a viable mode of transportation for employees by providing bicycle parking per the LAMC. Additionally, the Project will provide secure bicycle parking and showers and changing rooms for employees commuting to work by bicycle.

*Policy 14-1.2: Encourage the provision of showers, changing rooms, and bicycle storage at new and existing non-residential developments and public places.*

- The Project will provide bicycle parking per the LAMC and will also provide secure bicycle parking and showers and changing rooms for employees commuting to work by bicycle. The Project will provide promotional and marketing materials to employees to educate and encourage alternative modes of travel to and from work. Further, the Project is within convenient walking distance to Universal Studios Hollywood and Universal CityWalk. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to these nearby attractions.

*Objective 14-2: To promote pedestrian oriented areas and pedestrian routes for commuter, school, recreational use, economic revitalization, and access to transit facilities.*

- The Project is within convenient walking distance to Universal Studios Hollywood and Universal CityWalk. A pedestrian path connecting the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential off-site improvement. If constructed, the pedestrian path will facilitate trips by foot to these nearby attractions.

*Goal 15: A sufficient system of well-designed and convenient on-street parking and off-street parking facilities throughout the Plan Area.*

- Parking will be provided onsite in accordance with the LAMC, and existing vehicle access to the Project's onsite parking will be maintained. The expanded onsite parking garage will be developed in accordance with City standards.

*Objective 15-1: To provide parking in appropriate locations in accord with Citywide standards and community needs.*

- A total of 408 new vehicle parking spaces will be provided as part of the Project, which is in accordance with the LAMC.

*Policy 15-1.1: Consolidate parking where appropriate, to minimize the number of ingress and egress points onto arterials.*

- Vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the Project Site. Additional curb cuts along roadways bordering the Project Site are not proposed as part of the Project.

*Policy 15-1.3: New parking lots and new parking garages shall be developed in accordance with design standards.*

- Parking will be provided onsite in accordance with the LAMC, and existing vehicle access to the Project's onsite parking will be maintained. The expanded onsite parking garage will be developed in accordance with City standards.

# APPENDIX E

## LADOT VMT CALCULATOR OUTPUT (NO TDM)

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

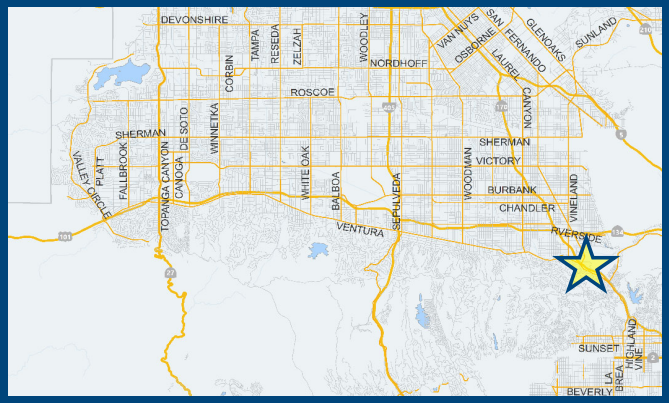
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

10/22/2020

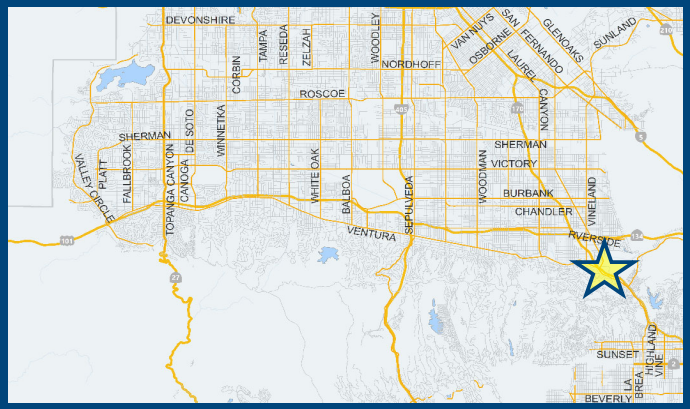
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
- 100 — city code parking provision for the project site
- 74 — actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

**Unbundle Parking**
- 175 — monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

**Parking Cash-Out**
- 50 — percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

**Price Workplace Parking**
- 6.00 — daily parking charge (dollar)
- 50 — percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

**Residential Area Parking Permits**
- 200 — cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| | |
|---|---|
| You, the User | |
| By: |  |
| Print Name: | Jason Shender |
| Title: | Transportation Planner II |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 20931 Burbank Boulevard, Suite C<br>Woodland Hills, CA 91367 |
| Phone: | (818) 835-8648 |
| Email Address: | jshender@llgengineers.com |
| Date: | 10/22/2020 |

# APPENDIX F

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

## LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2010, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for Signalized Intersections

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

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

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

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

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

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

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

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

## LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2010, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for TWSC/AWSC Intersections

| Level of Service | Average Control Delay (Sec/Veh) |
|---|---|
| A | ≤ 10 |
| B | > 10 and ≤ 15 |
| C | > 15 and ≤ 25 |
| D | > 25 and ≤ 35 |
| E | > 35 and ≤ 50 |
| F | > 50 |

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

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

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

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

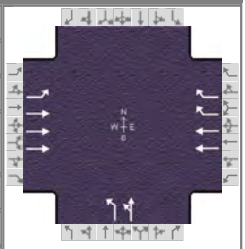
**LOS D** describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

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

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

# HCS7 Signalized Intersection Results Summary

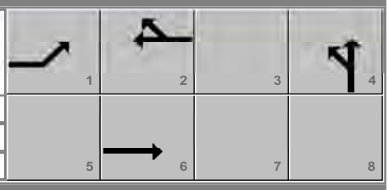
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 618 | | | 110 | 115 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.6 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.27 | | | | | 0.00 | | |

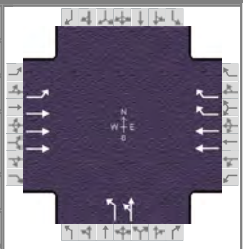
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 694 | | | 124 | 129 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.240 | | | 0.095 | 0.126 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 117.2 | | | 44.7 | 47.6 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.7 | | | 1.8 | 1.9 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.5 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.7 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.7 | B | | 21.5 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.7 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.92 | A | 0.70 | A | 1.40 | A | | |

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# HCS7 Signalized Intersection Results Summary

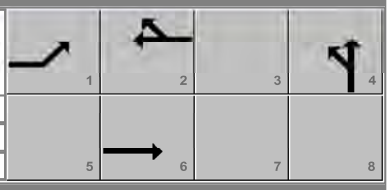
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 631 | | | 110 | 130 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.7 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.28 | | | | | 0.00 | | |

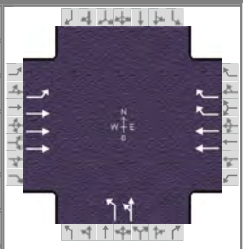
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 709 | | | 124 | 146 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 7.0 | | | 2.3 | 3.5 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 7.0 | | | 2.3 | 3.5 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.245 | | | 0.095 | 0.142 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 120 | | | 44.7 | 54.2 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.8 | | | 1.8 | 2.2 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.6 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.9 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.6 | B | | 21.6 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.6 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.93 | A | 0.71 | A | 1.40 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 94 | 773 | | | 117 | 216 | 504 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 1 | 2 | 3 | 4 | | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.2 | | | | | 19.2 | | |
| Green Extension Time ( $g_e$ ), s | 3.2 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.39 | | | | | 0.00 | | |

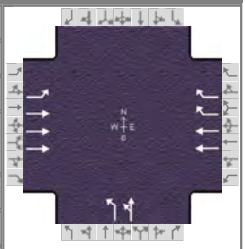
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 106 | 869 | | | 131 | 243 | 379 | 206 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.2 | 8.9 | | | 2.4 | 6.0 | 17.2 | 8.3 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.2 | 8.9 | | | 2.4 | 6.0 | 17.2 | 8.3 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.365 | 0.300 | | | 0.101 | 0.237 | 0.599 | 0.324 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 107.1 | 152.7 | | | 47.6 | 93.6 | 295.3 | 156.9 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.3 | 6.1 | | | 1.9 | 3.7 | 11.8 | 6.3 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.5 | 11.6 | | | 21.3 | 22.4 | 26.7 | 23.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | 0.3 | | | 0.2 | 0.5 | 1.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.2 | 11.9 | | | 21.4 | 22.9 | 27.8 | 23.9 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.8 | B | | 22.4 | C | | 26.5 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.8 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.02 | A | 0.80 | A | 1.45 | A | | |

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# HCS7 Signalized Intersection Results Summary

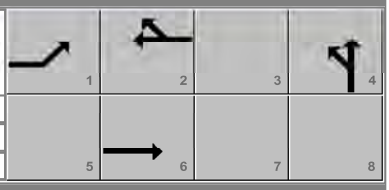
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future wirth Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 94 | 786 | | | 117 | 231 | 504 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.2 | | | | | 19.2 | | |
| Green Extension Time ( $g_e$ ), s | 3.3 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.40 | | | | | 0.00 | | |

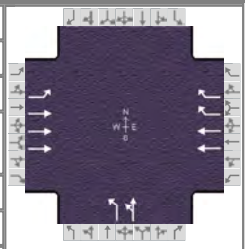
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 106 | 883 | | | 131 | 260 | 379 | 206 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.2 | 9.1 | | | 2.4 | 6.4 | 17.2 | 8.3 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.2 | 9.1 | | | 2.4 | 6.4 | 17.2 | 8.3 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.365 | 0.305 | | | 0.101 | 0.253 | 0.599 | 0.324 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 107.1 | 155.6 | | | 47.6 | 100.8 | 295.3 | 156.9 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.3 | 6.2 | | | 1.9 | 4.0 | 11.8 | 6.3 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.5 | 11.7 | | | 21.3 | 22.5 | 26.7 | 23.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | 0.3 | | | 0.2 | 0.6 | 1.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.2 | 11.9 | | | 21.4 | 23.1 | 27.8 | 23.9 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.8 | B | | 22.5 | C | | 26.5 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.8 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.03 | A | 0.81 | A | 1.45 | A | | |

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# HCS7 Signalized Intersection Results Summary

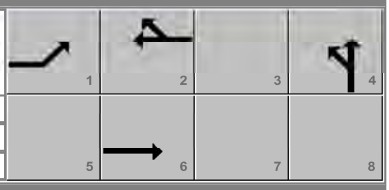
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 208 | | | 283 | 834 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

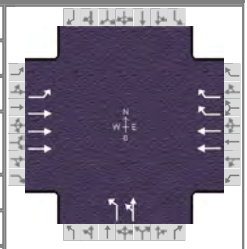
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 217 | | | 295 | 869 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.075 | | | 0.226 | 0.847 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 33 | | | 112.4 | 400.5 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.3 | | | 4.5 | 16.0 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.5 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 8.6 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 38.1 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 79.1 | E | | 34.2 | C | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.78 | A | 1.45 | A | 1.06 | A | | |

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# HCS7 Signalized Intersection Results Summary

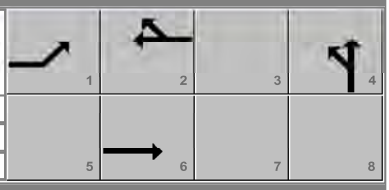
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 229 | | | 283 | 861 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

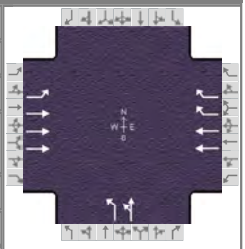
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 239 | | | 295 | 897 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.1 | | | 5.7 | 29.4 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.1 | | | 5.7 | 29.4 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.082 | | | 0.226 | 0.874 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 36.5 | | | 112.4 | 421.8 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.5 | | | 4.5 | 16.9 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.9 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 10.3 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 40.2 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 76.5 | E | | 35.9 | D | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.79 | A | 1.47 | A | 1.06 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 331 | 263 | | | 432 | 1034 | 330 | 30 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.5 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

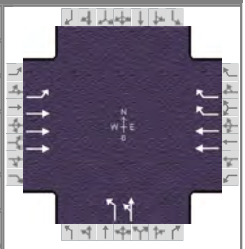
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 345 | 274 | | | 450 | 1077 | 230 | 145 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.5 | | | 9.1 | 36.0 | 9.5 | 5.6 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.5 | | | 9.1 | 36.0 | 9.5 | 5.6 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.191 | 0.095 | | | 0.346 | 1.050 | 0.364 | 0.226 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 622.7 | 42.2 | | | 180.6 | 648 | 178.4 | 106.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 24.9 | 1.7 | | | 7.2 | 25.9 | 7.1 | 4.2 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.2 | | | 23.4 | 32.0 | 24.2 | 22.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 114.9 | 0.1 | | | 0.7 | 42.1 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 156.9 | 10.3 | | | 24.1 | 74.1 | 24.3 | 23.0 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 92.0 | F | | 59.4 | E | | 23.8 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 62.1 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.83 | A | 1.75 | B | 1.11 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 331 | 284 | | | 432 | 1061 | 330 | 30 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.5 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

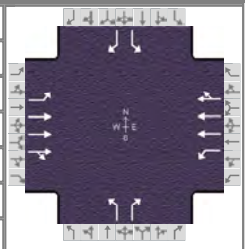
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 345 | 296 | | | 450 | 1105 | 230 | 145 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.7 | | | 9.1 | 36.0 | 9.5 | 5.6 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.7 | | | 9.1 | 36.0 | 9.5 | 5.6 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.191 | 0.102 | | | 0.346 | 1.077 | 0.364 | 0.226 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 622.7 | 45.7 | | | 180.6 | 699.8 | 178.4 | 106.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 24.9 | 1.8 | | | 7.2 | 28.0 | 7.1 | 4.2 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.3 | | | 23.4 | 32.0 | 24.2 | 22.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 114.9 | 0.1 | | | 0.7 | 51.3 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 156.9 | 10.3 | | | 24.1 | 83.3 | 24.3 | 23.0 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 89.2 | F | | 66.2 | E | | 23.8 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 65.7 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.84 | A | 1.77 | B | 1.11 | A | | |

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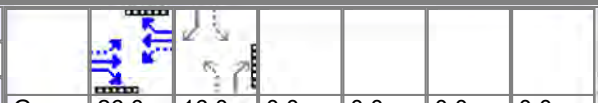
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

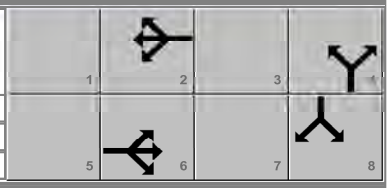


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 559 | 11 | 5 | 196 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

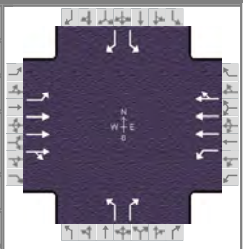
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 465 | 231 | 6 | 163 | 81 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1154 | 1900 | 1880 | 761 | 1900 | 1880 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.5 | 3.3 | 3.4 | 0.2 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | 3.3 | 3.4 | 3.6 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 719 | 1976 | 978 | 489 | 1976 | 977 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.093 | 0.235 | 0.236 | 0.012 | 0.082 | 0.083 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.1 | 51.1 | 54.2 | 1.6 | 16.3 | 17.2 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.0 | 2.2 | 0.1 | 0.7 | 0.7 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.5 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 6.9 | 6.8 | 7.1 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.91 | A | 0.63 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

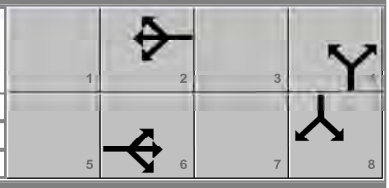
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 572 | 11 | 5 | 211 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

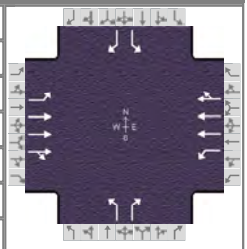
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 475 | 236 | 6 | 175 | 87 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1135 | 1900 | 1881 | 750 | 1900 | 1881 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.6 | 3.4 | 3.4 | 0.2 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.7 | 3.4 | 3.4 | 3.7 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 708 | 1976 | 978 | 483 | 1976 | 978 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.095 | 0.240 | 0.241 | 0.013 | 0.089 | 0.089 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.2 | 52.3 | 55.5 | 1.7 | 17.5 | 18.7 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.1 | 2.2 | 0.1 | 0.7 | 0.7 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.6 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.0 | 6.9 | 7.2 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.0 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.92 | A | 0.64 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

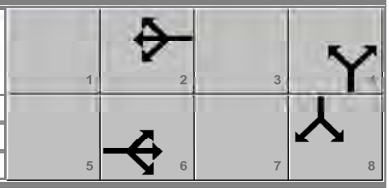
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 58 | 711 | 12 | 5 | 302 | 4 | 9 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( *Y+R c* ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( *g s* ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( *g e* ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

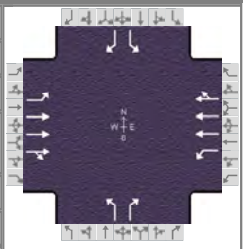
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 71 | 589 | 292 | 6 | 249 | 124 | 11 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1025 | 1900 | 1883 | 640 | 1900 | 1887 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( *g s* ), s | 1.9 | 4.4 | 4.4 | 0.3 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( *g c* ), s | 3.6 | 4.4 | 4.4 | 4.7 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 642 | 1976 | 979 | 420 | 1976 | 981 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.110 | 0.298 | 0.299 | 0.015 | 0.126 | 0.127 | 0.015 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18 | 67.4 | 71.7 | 1.8 | 25.6 | 27.2 | 3.4 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.7 | 2.9 | 0.1 | 1.0 | 1.1 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 7.1 | 6.8 | 6.8 | 8.2 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( *d 2* ), s/veh | 0.3 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.4 | 7.2 | 7.6 | 8.2 | 6.3 | 6.4 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.3 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.3 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.01 | A | 0.70 | A | | F | | F |

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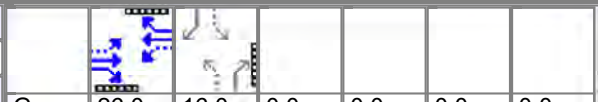
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

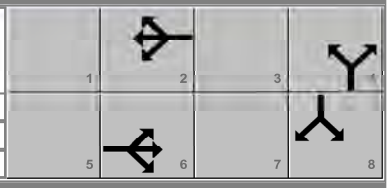


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 58 | 724 | 12 | 5 | 317 | 4 | 9 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

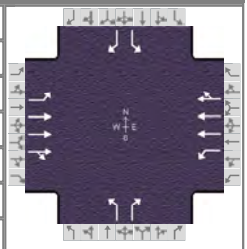
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 71 | 600 | 298 | 6 | 261 | 130 | 11 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1008 | 1900 | 1883 | 630 | 1900 | 1887 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.9 | 4.5 | 4.5 | 0.3 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.7 | 4.5 | 4.5 | 4.8 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 632 | 1976 | 979 | 415 | 1976 | 981 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.112 | 0.304 | 0.304 | 0.015 | 0.132 | 0.133 | 0.015 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18.2 | 68.6 | 73.4 | 1.8 | 26.9 | 28.5 | 3.4 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.7 | 2.9 | 0.1 | 1.1 | 1.1 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 7.1 | 6.8 | 6.8 | 8.2 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.4 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.5 | 7.2 | 7.6 | 8.3 | 6.3 | 6.5 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.4 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.3 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.02 | A | 0.71 | A | | F | | F |

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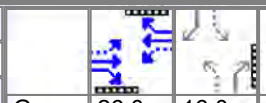
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

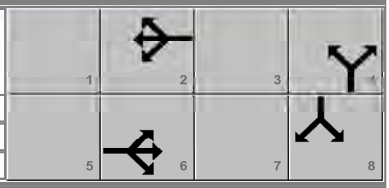


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 161 | 12 | 4 | 959 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

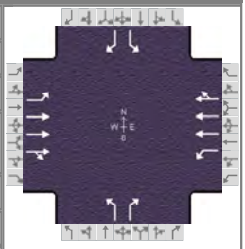
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 126 | 62 | 4 | 696 | 348 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 549 | 1900 | 1831 | 1214 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 0.8 | 0.8 | 0.1 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.4 | 0.8 | 0.8 | 0.9 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 371 | 1976 | 952 | 755 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.094 | 0.064 | 0.065 | 0.006 | 0.352 | 0.352 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.5 | 12.4 | 13.2 | 1 | 82.6 | 88.7 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.5 | 0.5 | 0.0 | 3.3 | 3.5 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.2 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.7 | 6.0 | 6.1 | 6.2 | 7.5 | 8.0 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.7 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.61 | A | 1.06 | A | | F | | F |

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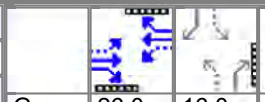
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

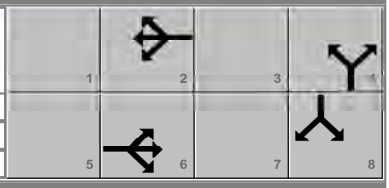


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 182 | 12 | 4 | 986 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

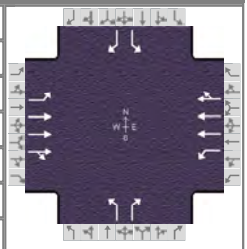
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 141 | 70 | 4 | 715 | 357 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 534 | 1900 | 1838 | 1189 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.1 | 0.9 | 0.9 | 0.1 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.6 | 0.9 | 0.9 | 1.0 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 362 | 1976 | 956 | 740 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.096 | 0.071 | 0.073 | 0.006 | 0.362 | 0.362 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.6 | 14 | 14.8 | 1 | 85.5 | 91.8 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.6 | 0.6 | 0.0 | 3.4 | 3.7 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.4 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.9 | 6.1 | 6.1 | 6.3 | 7.6 | 8.1 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.8 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.3 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.62 | A | 1.08 | A | | F | | F |

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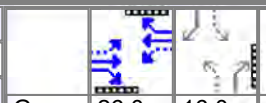
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

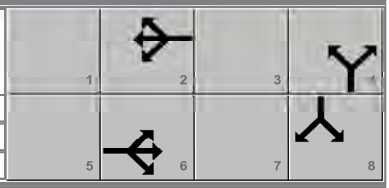


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 213 | 13 | 4 | 1300 | 1 | 12 | | 4 | 20 | | 163 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.2 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

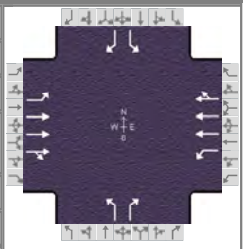
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 164 | 81 | 4 | 943 | 471 | 13 | | 4 | 22 | | 177 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 386 | 1900 | 1842 | 1152 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.4 | 1.1 | 1.1 | 0.1 | 7.9 | 7.9 | 0.2 | | 0.1 | 0.4 | | 4.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.3 | 1.1 | 1.1 | 1.2 | 7.9 | 7.9 | 0.2 | | 0.1 | 0.4 | | 4.2 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 284 | 1976 | 958 | 718 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.130 | 0.083 | 0.085 | 0.006 | 0.477 | 0.477 | 0.018 | | 0.008 | 0.030 | | 0.344 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 14.8 | 16.4 | 17.3 | 1 | 122.8 | 132.9 | 4 | | 1.3 | 6.8 | | 61.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.7 | 0.0 | 4.9 | 5.3 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.3 | 6.0 | 6.0 | 6.3 | 7.7 | 7.7 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.9 | 0.1 | 0.2 | 0.0 | 0.8 | 1.7 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.2 | 6.1 | 6.2 | 6.3 | 8.5 | 9.3 | 11.6 | | 11.6 | 11.7 | | 13.1 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.8 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.64 | A | 1.27 | A | | F | | F |

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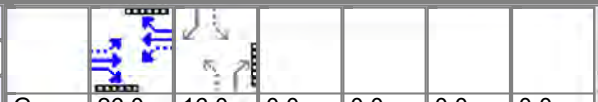
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

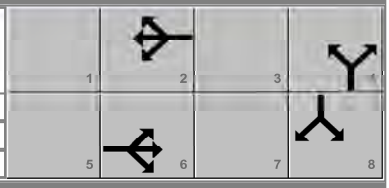


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 234 | 13 | 4 | 1327 | 1 | 12 | | 4 | 20 | | 163 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.2 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

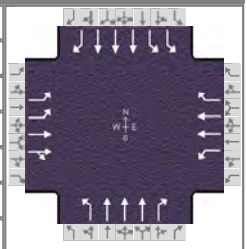
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 180 | 89 | 4 | 962 | 481 | 13 | | 4 | 22 | | 177 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 375 | 1900 | 1847 | 1128 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.5 | 1.2 | 1.2 | 0.1 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 1.2 | 1.2 | 1.3 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.2 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 278 | 1976 | 961 | 703 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.133 | 0.091 | 0.093 | 0.006 | 0.487 | 0.487 | 0.018 | | 0.008 | 0.030 | | 0.344 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 15 | 18.1 | 19.1 | 1 | 126.1 | 136.7 | 4 | | 1.3 | 6.8 | | 61.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.8 | 0.0 | 5.0 | 5.5 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.5 | 6.0 | 6.1 | 6.4 | 7.7 | 7.7 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 1.0 | 0.1 | 0.2 | 0.0 | 0.9 | 1.7 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.4 | 6.1 | 6.2 | 6.4 | 8.6 | 9.4 | 11.6 | | 11.6 | 11.7 | | 13.1 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.9 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.66 | A | 1.28 | A | | F | | F |

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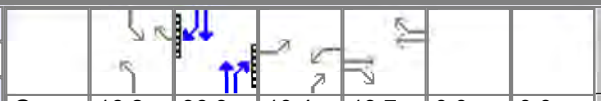
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

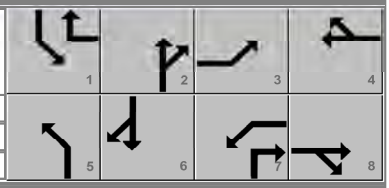


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 336 | 22 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.1 | 4.5 | 6.9 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.00 | 0.14 | 0.00 | | 1.00 | |

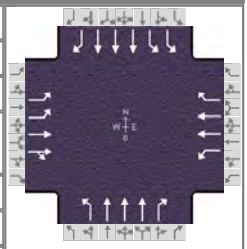
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 180 | 178 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1859 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.692 | 0.698 | 0.244 | 0.131 | 0.220 | 0.158 | 0.651 | 0.364 | 1.335 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 206.6 | 205.6 | 50.5 | 31.9 | 86.1 | 43.2 | 318.8 | 186.6 | 763.3 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.3 | 8.2 | 2.0 | 1.3 | 3.4 | 1.7 | 12.8 | 7.5 | 30.5 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.1 | 41.2 | 40.6 | 37.9 | 26.3 | 36.1 | 26.6 | 16.7 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.4 | 6.9 | 0.2 | 0.0 | 0.1 | 0.1 | 1.8 | 1.3 | 162.4 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 47.6 | 48.1 | 40.8 | 38.0 | 26.4 | 36.2 | 28.3 | 18.1 | 204.3 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 47.3 | D | | 33.0 | C | | 26.7 | C | | 88.4 | F | |
| Intersection Delay, s/veh / LOS | 59.8 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.98 | A | 0.67 | A | 1.34 | A | 1.73 | B |

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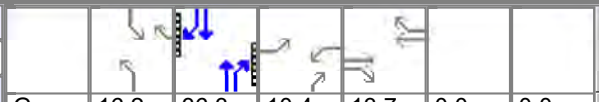
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

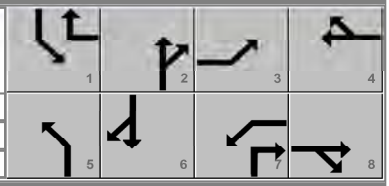


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 349 | 22 | 55 | 80 | 121 | 46 | 1223 | 309 | 782 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.5 | 4.8 | 7.7 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.01 | 0.23 | 0.00 | | 1.00 | |

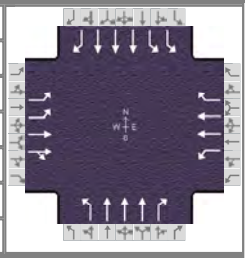
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 187 | 184 | 55 | 80 | 121 | 46 | 1223 | 309 | 782 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1860 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.4 | 9.5 | 2.8 | 2.0 | 5.7 | 2.2 | 19.7 | 12.5 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.4 | 9.5 | 2.8 | 2.0 | 5.7 | 2.2 | 19.7 | 12.5 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.717 | 0.723 | 0.274 | 0.161 | 0.251 | 0.158 | 0.651 | 0.405 | 1.374 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 216.1 | 215.2 | 56.8 | 39.4 | 99.5 | 43.2 | 318.8 | 207.5 | 815.5 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.6 | 8.6 | 2.3 | 1.6 | 4.0 | 1.7 | 12.8 | 8.3 | 32.6 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.3 | 41.3 | 40.8 | 38.1 | 26.6 | 36.1 | 26.6 | 17.1 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 7.9 | 8.5 | 0.3 | 0.1 | 0.1 | 0.1 | 1.8 | 1.6 | 179.1 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 49.2 | 49.8 | 41.0 | 38.1 | 26.7 | 36.2 | 28.3 | 18.7 | 221.0 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 48.4 | D | | 33.3 | C | | 26.7 | C | | 95.2 | F | |
| Intersection Delay, s/veh / LOS | 62.9 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 0.70 | A | 1.36 | A | 1.74 | B |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 15, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

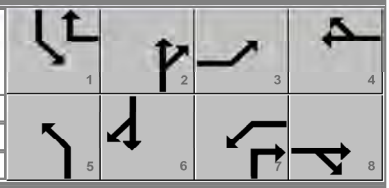


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 297 | 433 | 23 | 183 | 135 | 214 | 50 | 1420 | 557 | 975 | 1472 | 154 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.3 | 13.9 | 12.0 | 12.7 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

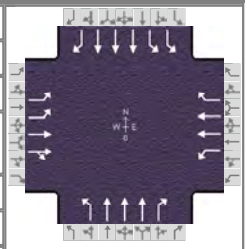
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 297 | 229 | 227 | 183 | 135 | 214 | 50 | 1420 | 557 | 975 | 1472 | 154 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1866 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.3 | 11.9 | 11.9 | 10.0 | 3.3 | 10.7 | 2.4 | 24.1 | 27.8 | 16.2 | 25.3 | 6.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.3 | 11.9 | 11.9 | 10.0 | 3.3 | 10.7 | 2.4 | 24.1 | 27.8 | 16.2 | 25.3 | 6.7 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.813 | 0.882 | 0.886 | 0.911 | 0.272 | 0.444 | 0.172 | 0.756 | 0.730 | 1.713 | 0.784 | 0.263 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 189.9 | 299.7 | 299 | 272.2 | 67.5 | 187.9 | 47.1 | 379.9 | 413 | 1285.3 | 397.7 | 119.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.6 | 12.0 | 12.0 | 10.9 | 2.7 | 7.5 | 1.9 | 15.2 | 16.5 | 51.4 | 15.9 | 4.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.8 | 42.4 | 42.4 | 44.0 | 38.7 | 28.3 | 36.2 | 28.0 | 21.2 | 41.9 | 28.4 | 22.4 |
| Incremental Delay ( $d_2$ ), s/veh | 12.2 | 26.8 | 28.0 | 38.9 | 0.1 | 0.2 | 0.1 | 2.9 | 6.1 | 328.1 | 3.4 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 56.1 | 69.2 | 70.4 | 82.9 | 38.8 | 28.6 | 36.3 | 30.8 | 27.2 | 370.0 | 31.7 | 23.5 |
| Level of Service (LOS) | E | E | E | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 64.4 | E | | 49.9 | D | | 30.0 | C | | 158.0 | F | |
| Intersection Delay, s/veh / LOS | 92.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.11 | A | 0.93 | A | 1.60 | B | 1.92 | B |

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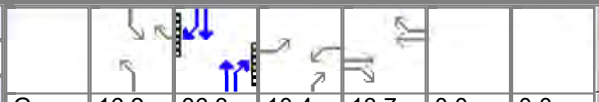
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 15, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

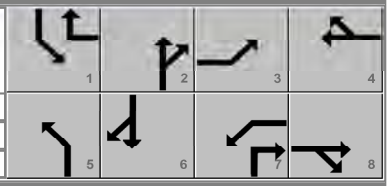


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 297 | 446 | 23 | 189 | 150 | 229 | 50 | 1420 | 588 | 997 | 1472 | 154 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.3 | 14.3 | 12.4 | 13.6 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

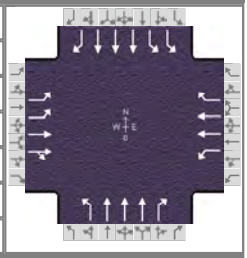
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 297 | 236 | 233 | 189 | 150 | 229 | 50 | 1420 | 588 | 997 | 1472 | 154 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1867 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.3 | 12.2 | 12.3 | 10.4 | 3.7 | 11.6 | 2.4 | 24.1 | 30.3 | 16.2 | 25.3 | 6.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.3 | 12.2 | 12.3 | 10.4 | 3.7 | 11.6 | 2.4 | 24.1 | 30.3 | 16.2 | 25.3 | 6.7 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.813 | 0.907 | 0.911 | 0.941 | 0.303 | 0.476 | 0.172 | 0.756 | 0.770 | 1.751 | 0.784 | 0.263 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 189.9 | 316.9 | 316.4 | 291.1 | 75.4 | 200.2 | 47.1 | 379.9 | 448.7 | 1339.3 | 397.7 | 119.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.6 | 12.7 | 12.7 | 11.6 | 3.0 | 8.0 | 1.9 | 15.2 | 17.9 | 53.6 | 15.9 | 4.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.8 | 42.5 | 42.5 | 44.1 | 38.8 | 28.6 | 36.2 | 28.0 | 21.8 | 41.9 | 28.4 | 22.4 |
| Incremental Delay ( $d_2$ ), s/veh | 12.2 | 31.7 | 33.0 | 46.4 | 0.1 | 0.3 | 0.1 | 2.9 | 7.4 | 345.3 | 3.4 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 56.1 | 74.2 | 75.6 | 90.5 | 39.0 | 28.9 | 36.3 | 30.8 | 29.2 | 387.2 | 31.7 | 23.5 |
| Level of Service (LOS) | E | E | E | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 67.6 | E | | 52.1 | D | | 30.5 | C | | 166.4 | F | |
| Intersection Delay, s/veh / LOS | 96.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.12 | A | 0.96 | A | 1.62 | B | 1.93 | B |

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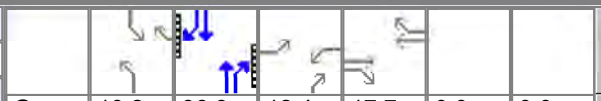
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

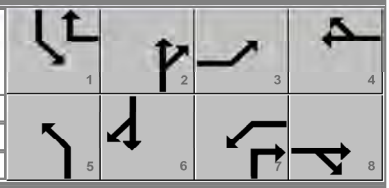


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 37 | 43 | 146 | 393 | 423 | 178 | 1233 | 130 | 150 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( *Y+R c* ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( *g s* ), s | 5.8 | 4.5 | 10.4 | 19.7 | 12.1 | | 6.4 | |
| Green Extension Time ( *g e* ), s | 0.2 | 2.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.04 | 1.00 | 1.00 | 1.00 | | 0.41 | |

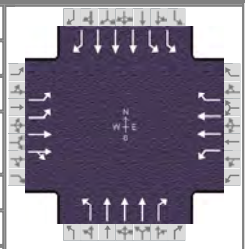
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 40 | 47 | 159 | 427 | 460 | 193 | 1340 | 141 | 163 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1610 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( *g s* ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 285 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.120 | 0.164 | 0.669 | 0.667 | 1.023 | 1.059 | 0.713 | 0.178 | 0.455 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 37.5 | 44.1 | 185.2 | 219.4 | 597.4 | 344.5 | 354.1 | 81 | 84.7 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 1.5 | 1.8 | 7.4 | 8.8 | 23.9 | 13.8 | 14.2 | 3.2 | 3.4 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 40.0 | 34.6 | 34.9 | 41.4 | 38.4 | 36.1 | 45.0 | 27.4 | 14.0 | 42.3 | 25.7 | 29.5 |
| Incremental Delay ( *d 2* ), s/veh | 0.2 | 0.1 | 0.1 | 5.8 | 2.2 | 48.6 | 82.9 | 2.3 | 0.5 | 0.3 | 1.3 | 15.3 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 34.7 | 35.0 | 47.2 | 40.6 | 84.6 | 127.9 | 29.7 | 14.5 | 42.6 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | C | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.2 | D | | 60.9 | E | | 39.8 | D | | 33.6 | C | |
| Intersection Delay, s/veh / LOS | 42.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.68 | A | 1.35 | A | 1.41 | A | 1.46 | A |

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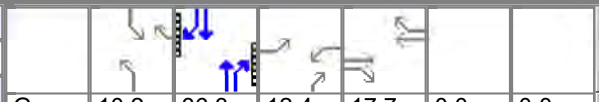
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

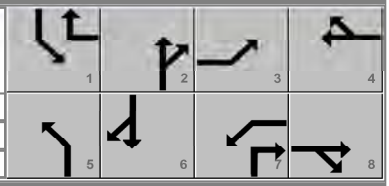


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 58 | 43 | 157 | 420 | 450 | 178 | 1233 | 179 | 185 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | 4.8 | 11.0 | 19.7 | 12.1 | | 7.5 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 2.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.06 | 1.00 | 1.00 | 1.00 | | 1.00 | |

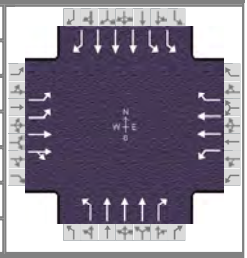
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 56 | 54 | 171 | 457 | 489 | 193 | 1340 | 195 | 201 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1644 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.8 | 2.5 | 2.8 | 9.0 | 11.9 | 17.7 | 10.1 | 22.3 | 7.0 | 5.5 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 2.5 | 2.8 | 9.0 | 11.9 | 17.7 | 10.1 | 22.3 | 7.0 | 5.5 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 291 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.166 | 0.186 | 0.720 | 0.713 | 1.089 | 1.059 | 0.713 | 0.245 | 0.561 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 52.5 | 51.1 | 203.8 | 235.5 | 694.6 | 344.5 | 354.1 | 116.2 | 107.4 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 2.1 | 2.0 | 8.2 | 9.4 | 27.8 | 13.8 | 14.2 | 4.6 | 4.3 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.0 | 34.9 | 35.0 | 41.7 | 38.8 | 36.1 | 45.0 | 27.4 | 14.6 | 42.8 | 25.7 | 29.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 8.8 | 3.2 | 68.6 | 82.9 | 2.3 | 0.7 | 1.2 | 1.3 | 15.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 35.0 | 35.1 | 50.5 | 42.0 | 104.6 | 127.9 | 29.7 | 15.3 | 44.0 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | D | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.0 | D | | 70.7 | E | | 39.1 | D | | 33.9 | C | |
| Intersection Delay, s/veh / LOS | 44.3 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.70 | A | 1.41 | A | 1.44 | A | 1.48 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 15, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

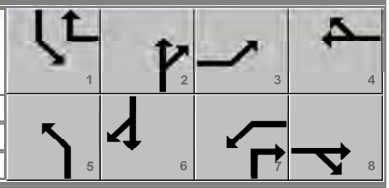


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 157 | 70 | 45 | 289 | 533 | 687 | 187 | 1338 | 299 | 308 | 1172 | 659 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.5 | 5.2 | 15.1 | 19.7 | 12.1 | | 11.5 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.04 | 0.18 | 1.00 | 1.00 | 1.00 | | 1.00 | |

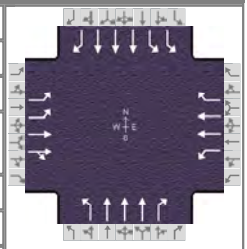
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 171 | 64 | 61 | 314 | 579 | 747 | 203 | 1454 | 325 | 335 | 1274 | 716 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1662 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.5 | 2.8 | 3.2 | 13.1 | 15.7 | 17.7 | 10.1 | 24.9 | 12.8 | 9.5 | 20.8 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | 2.8 | 3.2 | 13.1 | 15.7 | 17.7 | 10.1 | 24.9 | 12.8 | 9.5 | 20.8 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 294 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.392 | 0.189 | 0.209 | 1.325 | 0.905 | 1.662 | 1.112 | 0.774 | 0.409 | 0.934 | 0.678 | 1.226 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 88 | 60.2 | 58.4 | 671.6 | 328.4 | 1862.4 | 379.4 | 391.7 | 209.6 | 235.8 | 333.8 | 1180 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.5 | 2.4 | 2.3 | 26.9 | 13.1 | 74.5 | 15.2 | 15.7 | 8.4 | 9.4 | 13.4 | 47.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.3 | 35.0 | 35.2 | 43.5 | 40.3 | 36.1 | 45.0 | 28.2 | 16.0 | 44.6 | 26.9 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 172.6 | 16.0 | 307.7 | 99.8 | 3.2 | 1.6 | 30.7 | 2.0 | 116.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.5 | 35.1 | 35.3 | 216.0 | 56.4 | 343.8 | 144.8 | 31.4 | 17.6 | 75.3 | 28.9 | 148.0 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | E | C | F |
| Approach Delay, s/veh / LOS | 38.3 | D | | 217.8 | F | | 40.8 | D | | 72.3 | E | |
| Intersection Delay, s/veh / LOS | 98.9 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.73 | A | 1.84 | B | 1.58 | B | 1.77 | B |

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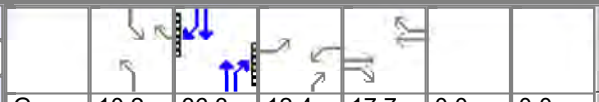
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 15, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

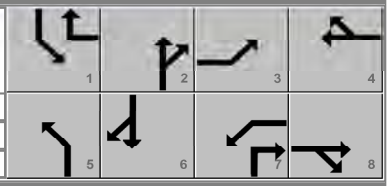


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 157 | 91 | 45 | 300 | 560 | 714 | 187 | 1338 | 348 | 343 | 1172 | 659 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.5 | 5.7 | 15.1 | 19.7 | 12.1 | | 12.2 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.04 | 0.22 | 1.00 | 1.00 | 1.00 | | 1.00 | |

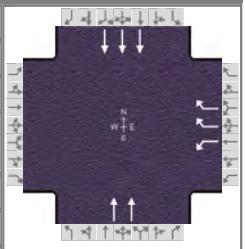
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 171 | 75 | 73 | 326 | 609 | 776 | 203 | 1454 | 378 | 373 | 1274 | 716 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1695 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.5 | 3.4 | 3.7 | 13.1 | 16.6 | 17.7 | 10.1 | 24.9 | 15.5 | 10.2 | 20.8 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | 3.4 | 3.7 | 13.1 | 16.6 | 17.7 | 10.1 | 24.9 | 15.5 | 10.2 | 20.8 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 300 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.392 | 0.223 | 0.242 | 1.376 | 0.951 | 1.728 | 1.112 | 0.774 | 0.476 | 1.040 | 0.678 | 1.226 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 88 | 71.5 | 69.5 | 726.1 | 364 | 2004.6 | 379.4 | 391.7 | 245.4 | 296.5 | 333.8 | 1180 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.5 | 2.9 | 2.8 | 29.0 | 14.6 | 80.2 | 15.2 | 15.7 | 9.8 | 11.9 | 13.4 | 47.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.3 | 35.3 | 35.4 | 43.5 | 40.7 | 36.1 | 45.0 | 28.2 | 16.7 | 44.9 | 26.9 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.2 | 193.3 | 23.8 | 336.7 | 99.8 | 3.2 | 2.0 | 58.3 | 2.0 | 116.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.5 | 35.4 | 35.5 | 236.8 | 64.5 | 372.7 | 144.8 | 31.4 | 18.8 | 103.2 | 28.9 | 148.0 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | F | C | F |
| Approach Delay, s/veh / LOS | 38.2 | D | | 237.1 | F | | 40.4 | D | | 76.7 | E | |
| Intersection Delay, s/veh / LOS | 106.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.75 | A | 1.90 | B | 1.61 | B | 1.79 | B |

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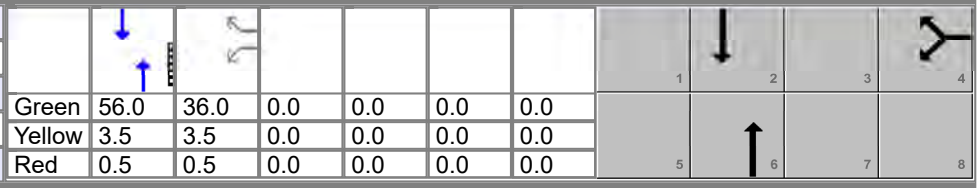
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 772 | | 388 | | | 1857 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.15 | | | | |

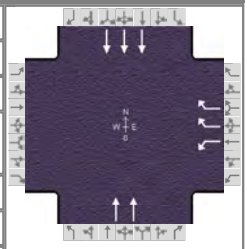
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 813 | | 408 | | | 1955 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.792 | | 0.202 | | | 0.674 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 344.6 | | 97 | | | 375.9 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 13.8 | | 3.9 | | | 15.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.6 | | 10.9 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.0 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 32.6 | | 11.1 | | | 16.8 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.7 | | C | 11.1 | | B | 16.8 | | B |
| Intersection Delay, s/veh / LOS | 20.2 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.82 | A | 1.56 | B |

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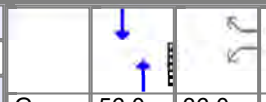
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

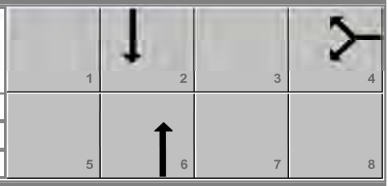


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 785 | | 406 | | | 1863 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.20 | | | | |

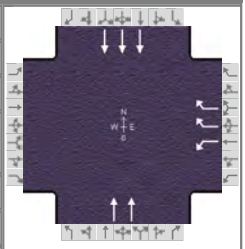
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 826 | | 427 | | | 1961 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 26.1 | | 5.9 | | | 26.8 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 26.1 | | 5.9 | | | 26.8 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.805 | | 0.211 | | | 0.677 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 353.1 | | 102.1 | | | 377.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 14.1 | | 4.1 | | | 15.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.8 | | 11.0 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.4 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 33.3 | | 11.2 | | | 16.9 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.3 | | C | 11.2 | | B | 16.9 | | B |
| Intersection Delay, s/veh / LOS | 20.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.84 | A | 1.57 | B |

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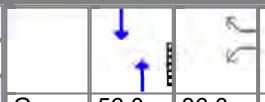
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

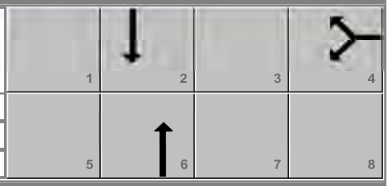


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 74 | | 1148 | | 472 | | | 2107 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

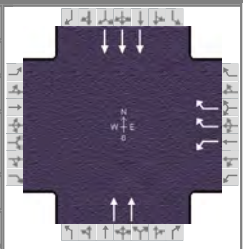
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 78 | | 1208 | | 497 | | | 2218 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.0 | | | 33.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.0 | | | 33.0 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.120 | | 1.178 | | 0.245 | | | 0.765 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 53.9 | | 907.9 | | 121.7 | | | 451.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 36.3 | | 4.9 | | | 18.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.2 | | | 16.9 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 90.3 | | 0.3 | | | 2.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 122.3 | | 11.5 | | | 18.9 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 116.2 | | F | 11.5 | | B | 18.9 | | B |
| Intersection Delay, s/veh / LOS | 49.3 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.90 | A | 1.71 | B |

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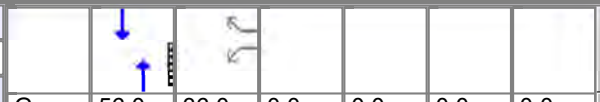
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

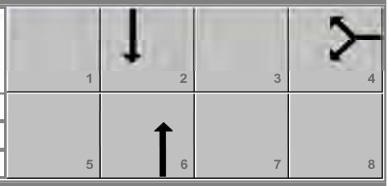


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 74 | | 1161 | | 490 | | | 2113 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

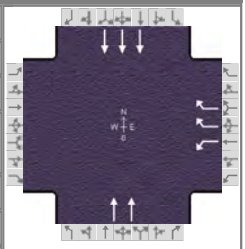
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 78 | | 1222 | | 516 | | | 2224 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.3 | | | 33.2 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.3 | | | 33.2 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.120 | | 1.191 | | 0.255 | | | 0.767 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 53.9 | | 939.3 | | 127 | | | 453.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 37.6 | | 5.1 | | | 18.2 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.3 | | | 17.0 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 95.8 | | 0.3 | | | 2.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 127.8 | | 11.6 | | | 19.0 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 121.4 | | F | 11.6 | | B | 19.0 | | B |
| Intersection Delay, s/veh / LOS | 51.0 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.91 | A | 1.71 | B |

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# HCS7 Signalized Intersection Results Summary

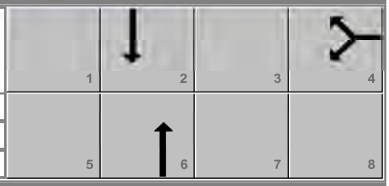
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 753 | | 787 | | | 1195 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 2.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.19 | | | | |

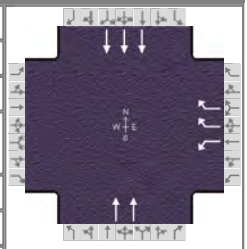
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 818 | | 855 | | | 1299 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.798 | | 0.422 | | | 0.448 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 348.1 | | 226.2 | | | 230 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 13.9 | | 9.0 | | | 9.2 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 28.7 | | 12.7 | | | 12.9 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 4.2 | | 0.6 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 32.9 | | 13.3 | | | 13.4 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.5 | | C | 13.3 | | B | 13.4 | | B |
| Intersection Delay, s/veh / LOS | 18.9 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.19 | A | 1.20 | A |

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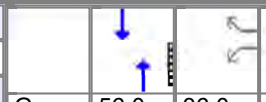
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

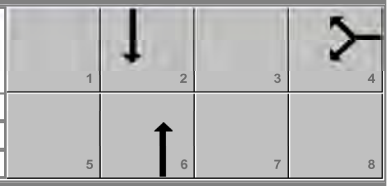


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 774 | | 815 | | | 1206 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.27 | | | | |

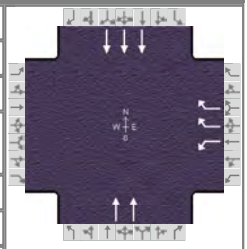
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 841 | | 886 | | | 1311 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 26.8 | | 14.3 | | | 14.9 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 26.8 | | 14.3 | | | 14.9 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.820 | | 0.437 | | | 0.452 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 362.9 | | 234.8 | | | 232.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 14.5 | | 9.4 | | | 9.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 29.1 | | 12.8 | | | 13.0 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 5.0 | | 0.7 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 34.1 | | 13.5 | | | 13.5 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.6 | | C | 13.5 | | B | 13.5 | | B |
| Intersection Delay, s/veh / LOS | 19.3 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.22 | A | 1.21 | A |

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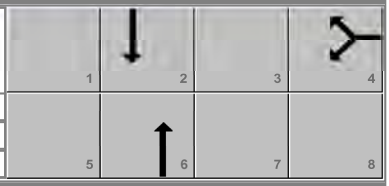
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 119 | | 923 | | 899 | | | 1504 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 36.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

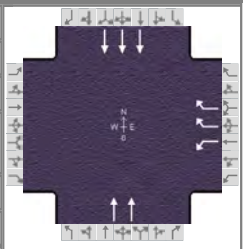
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 129 | | 1003 | | 977 | | | 1635 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.9 | | 34.8 | | 16.3 | | | 20.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.9 | | 34.8 | | 16.3 | | | 20.3 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.199 | | 0.978 | | 0.482 | | | 0.564 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 92.3 | | 520.9 | | 261.3 | | | 298.7 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.7 | | 20.8 | | 10.5 | | | 11.9 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 31.6 | | 13.3 | | | 14.1 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 22.7 | | 0.8 | | | 0.8 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.1 | | 54.3 | | 14.1 | | | 14.9 | |
| Level of Service (LOS) | | | | C | | D | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 50.6 | | D | 14.1 | | B | 14.9 | | B |
| Intersection Delay, s/veh / LOS | 25.5 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.29 | A | 1.39 | A |

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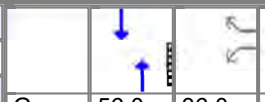
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

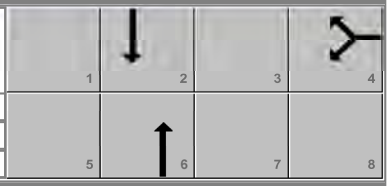


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 119 | | 944 | | 927 | | | 1515 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

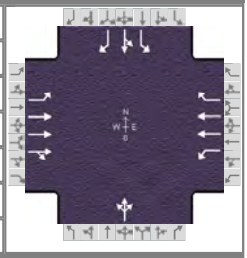
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 129 | | 1026 | | 1008 | | | 1647 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.9 | | 36.0 | | 17.0 | | | 20.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.9 | | 36.0 | | 17.0 | | | 20.5 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.199 | | 1.000 | | 0.497 | | | 0.568 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 92.3 | | 556.9 | | 270.3 | | | 301.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.7 | | 22.3 | | 10.8 | | | 12.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 32.0 | | 13.4 | | | 14.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 28.1 | | 0.9 | | | 0.8 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.1 | | 60.1 | | 14.3 | | | 15.0 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 55.9 | | E | 14.3 | | B | 15.0 | | B |
| Intersection Delay, s/veh / LOS | 27.2 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.32 | A | 1.39 | A |

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# HCS7 Signalized Intersection Results Summary

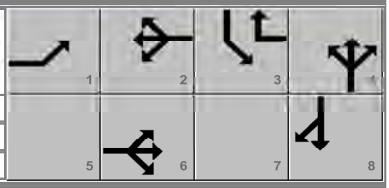
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 201 | 34 | 65 | 54 | 929 | 105 | 1019 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

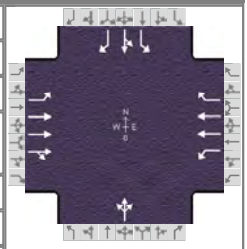
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 205 | | 156 | | 635 | 420 | 1040 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( *g s* ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( *g c* ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.257 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 122.9 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 4.9 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.6 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.8 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.3 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 22.1 | C | | 36.0 | D | | 82.4 | F | |
| Intersection Delay, s/veh / LOS | 54.8 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.79 | A | 0.75 | A | 3.94 | D |

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# HCS7 Signalized Intersection Results Summary

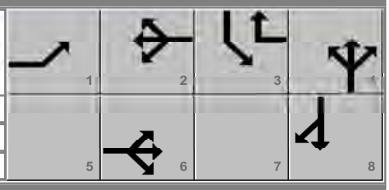
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 219 | 34 | 65 | 54 | 929 | 105 | 1025 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

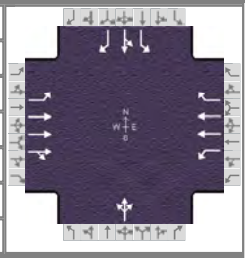
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 223 | | 156 | | 635 | 420 | 1046 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( *g s* ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 8.1 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( *g c* ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 8.1 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.280 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 135.8 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 5.4 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.7 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.9 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.6 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 22.0 | C | | 36.0 | D | | 82.1 | F | |
| Intersection Delay, s/veh / LOS | 54.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.81 | A | 0.75 | A | 3.95 | D |

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# HCS7 Signalized Intersection Results Summary

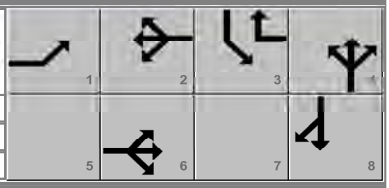
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 51 | 1644 | 11 | 12 | 160 | 251 | 36 | 93 | 57 | 1065 | 113 | 1135 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 3.8 | | | | | 11.5 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.03 | | | | | 0.06 | | 1.00 |

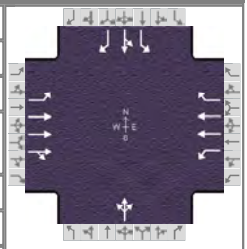
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 52 | 1127 | 562 | 12 | 163 | 256 | | 190 | | 728 | 474 | 1158 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 296 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( *g s* ), s | 1.8 | 25.5 | 25.5 | 3.7 | 3.6 | 9.5 | | 9.5 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( *g c* ), s | 1.8 | 25.5 | 25.5 | 14.2 | 3.6 | 9.5 | | 9.5 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 532 | 1505 | 750 | 114 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.098 | 0.749 | 0.749 | 0.108 | 0.183 | 0.321 | | 0.532 | | 1.610 | 1.035 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 34.7 | 431.7 | 451.7 | 14.6 | 71.1 | 159.8 | | 192.5 | | 1789.5 | 617 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.4 | 17.3 | 18.1 | 0.6 | 2.8 | 6.4 | | 7.7 | | 71.6 | 24.7 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 20.2 | 25.9 | 25.9 | 38.5 | 29.8 | 15.1 | | 35.8 | | 37.5 | 37.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.1 | 3.5 | 6.8 | 1.9 | 0.5 | 1.1 | | 1.5 | | 284.4 | 51.4 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.3 | 29.4 | 32.7 | 40.4 | 30.2 | 16.2 | | 37.3 | | 321.9 | 88.9 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 30.2 | C | | 22.2 | C | | 37.3 | D | | 117.2 | F | |
| Intersection Delay, s/veh / LOS | 73.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.45 | A | 0.84 | A | 0.80 | A | 4.38 | D |

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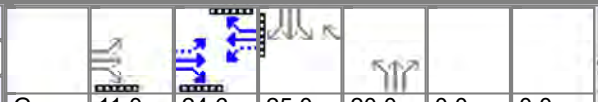
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

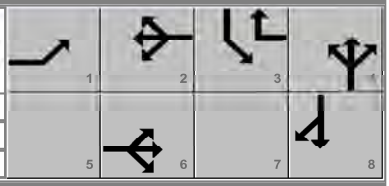


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 51 | 1644 | 11 | 12 | 160 | 269 | 36 | 93 | 57 | 1065 | 113 | 1141 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 3.8 | | | | | 11.5 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.03 | | | | | 0.06 | | 1.00 |

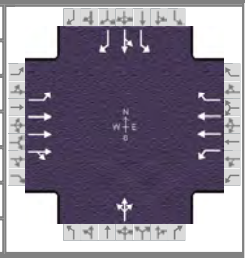
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 52 | 1127 | 562 | 12 | 163 | 274 | | 190 | | 728 | 474 | 1164 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 296 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( $g_s$ ), s | 1.8 | 25.5 | 25.5 | 3.7 | 3.6 | 10.4 | | 9.5 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 1.8 | 25.5 | 25.5 | 14.2 | 3.6 | 10.4 | | 9.5 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 532 | 1505 | 750 | 114 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.098 | 0.749 | 0.749 | 0.108 | 0.183 | 0.344 | | 0.532 | | 1.610 | 1.035 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 34.7 | 431.7 | 451.7 | 14.6 | 71.1 | 173.7 | | 192.5 | | 1789.5 | 617 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.4 | 17.3 | 18.1 | 0.6 | 2.8 | 6.9 | | 7.7 | | 71.6 | 24.7 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.2 | 25.9 | 25.9 | 38.5 | 29.8 | 15.3 | | 35.8 | | 37.5 | 37.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 3.5 | 6.8 | 1.9 | 0.5 | 1.2 | | 1.5 | | 284.4 | 51.4 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.3 | 29.4 | 32.7 | 40.4 | 30.2 | 16.5 | | 37.3 | | 321.9 | 88.9 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 30.2 | C | | 22.1 | C | | 37.3 | D | | 116.9 | F | |
| Intersection Delay, s/veh / LOS | 72.9 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.45 | A | 0.86 | A | 0.80 | A | 4.39 | D |

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# HCS7 Signalized Intersection Results Summary

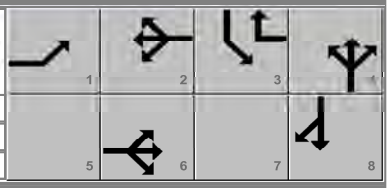
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 541 | 53 | 126 | 63 | 465 | 144 | 691 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

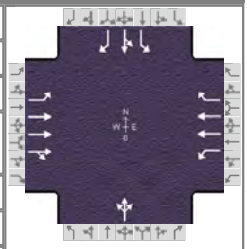
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 546 | | 244 | | 315 | 300 | 698 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( $g_s$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.684 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 381.2 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 15.2 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.2 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 4.7 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 24.0 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.3 | C | | 42.2 | D | | 17.7 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.47 | A | 0.89 | A | 2.65 | C |

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# HCS7 Signalized Intersection Results Summary

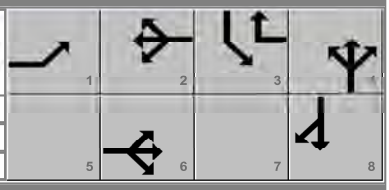
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 569 | 53 | 126 | 63 | 465 | 144 | 702 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

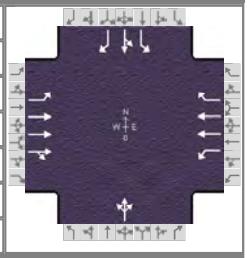
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 575 | | 244 | | 315 | 300 | 709 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( $g_s$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.720 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 409.5 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 16.4 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.8 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 5.5 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 25.3 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.8 | C | | 42.2 | D | | 17.5 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.49 | A | 0.89 | A | 2.67 | C |

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# HCS7 Signalized Intersection Results Summary

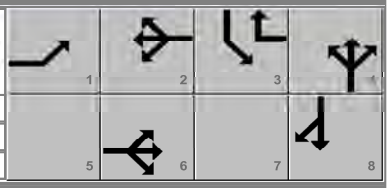
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 110 | 838 | 18 | 44 | 633 | 627 | 56 | 142 | 66 | 559 | 154 | 901 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( *g s* ), s | 6.1 | | | | | 15.9 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.48 | | | | | 1.00 | | 1.00 |

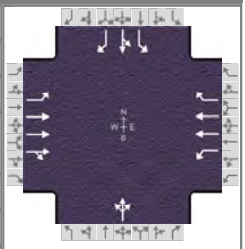
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 111 | 578 | 286 | 44 | 639 | 633 | | 267 | | 378 | 342 | 910 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 650 | 1809 | 1610 | | 1800 | | 1810 | 1851 | |
| Queue Service Time ( *g s* ), s | 4.1 | 10.8 | 10.9 | 5.5 | 16.2 | 24.6 | | 13.9 | | 19.8 | 17.0 | |
| Cycle Queue Clearance Time ( *g c* ), s | 4.1 | 10.8 | 10.9 | 5.5 | 16.2 | 24.6 | | 13.9 | | 19.8 | 17.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 339 | 1505 | 744 | 232 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.328 | 0.384 | 0.385 | 0.192 | 0.718 | 0.793 | | 0.741 | | 0.836 | 0.739 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 77.9 | 210.3 | 214.1 | 43.6 | 300.8 | 476.8 | | 280.6 | | 382.4 | 323.1 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 8.4 | 8.6 | 1.7 | 12.0 | 19.1 | | 11.2 | | 15.3 | 12.9 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 22.7 | 21.5 | 21.5 | 30.5 | 34.5 | 20.9 | | 37.6 | | 35.6 | 34.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.6 | 0.7 | 1.5 | 1.8 | 5.0 | 8.0 | | 7.9 | | 12.9 | 6.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.2 | 22.3 | 23.0 | 32.3 | 39.5 | 28.9 | | 45.5 | | 48.4 | 40.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.6 | C | | 34.2 | C | | 45.5 | D | | 19.8 | B | |
| Intersection Delay, s/veh / LOS | 26.6 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.02 | A | 1.57 | B | 0.93 | A | 3.18 | C |

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# HCS7 Signalized Intersection Results Summary

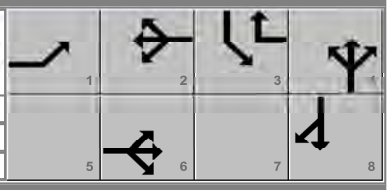
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 110 | 838 | 18 | 44 | 633 | 655 | 56 | 142 | 66 | 559 | 154 | 912 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( $g_s$ ), s | 6.1 | | | | | 15.9 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.48 | | | | | 1.00 | | 1.00 |

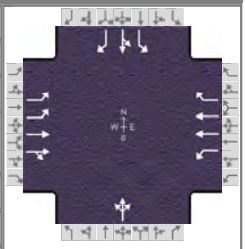
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 111 | 578 | 286 | 44 | 639 | 662 | | 267 | | 378 | 342 | 921 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 650 | 1809 | 1610 | | 1800 | | 1810 | 1851 | |
| Queue Service Time ( $g_s$ ), s | 4.1 | 10.8 | 10.9 | 5.5 | 16.2 | 24.6 | | 13.9 | | 19.8 | 17.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.1 | 10.8 | 10.9 | 5.5 | 16.2 | 24.6 | | 13.9 | | 19.8 | 17.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 339 | 1505 | 744 | 232 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.328 | 0.384 | 0.385 | 0.192 | 0.718 | 0.828 | | 0.741 | | 0.836 | 0.739 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 77.9 | 210.3 | 214.1 | 43.6 | 300.8 | 514.6 | | 280.6 | | 382.4 | 323.1 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 8.4 | 8.6 | 1.7 | 12.0 | 20.6 | | 11.2 | | 15.3 | 12.9 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 22.7 | 21.5 | 21.5 | 30.5 | 34.5 | 21.6 | | 37.6 | | 35.6 | 34.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.6 | 0.7 | 1.5 | 1.8 | 5.0 | 9.7 | | 7.9 | | 12.9 | 6.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.2 | 22.3 | 23.0 | 32.3 | 39.5 | 31.2 | | 45.5 | | 48.4 | 40.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.6 | C | | 35.2 | D | | 45.5 | D | | 19.6 | B | |
| Intersection Delay, s/veh / LOS | 26.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.02 | A | 1.60 | B | 0.93 | A | 3.20 | C |

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# HCS7 Signalized Intersection Results Summary

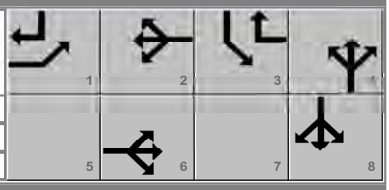
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 212 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 | |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 | |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

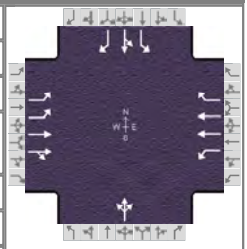
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 219 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.368 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 205.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 27.6 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.2 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 46.2 | D | |
| Intersection Delay, s/veh / LOS | 52.0 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.59 | B |

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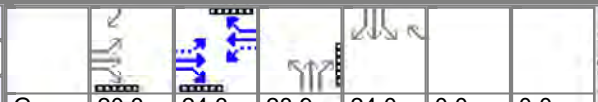
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

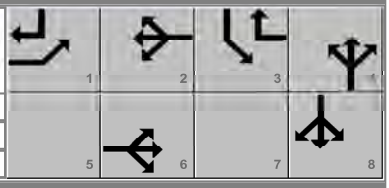


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 230 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

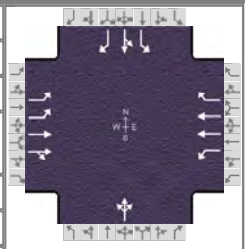
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 237 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.1 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.1 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.399 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 221.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 28.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.6 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.6 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 45.9 | D | |
| Intersection Delay, s/veh / LOS | 51.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.63 | B |

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# HCS7 Signalized Intersection Results Summary

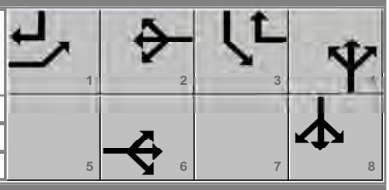
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 512 | 1635 | 15 | 16 | 435 | 23 | 39 | 11 | 18 | 468 | 6 | 243 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 | |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 | |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.0 | | | | | 5.8 | | 22.9 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.5 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.62 | | | | | 0.00 | | 1.00 |

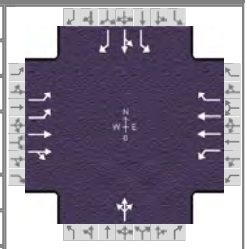
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 528 | 851 | 850 | 16 | 448 | 24 | | 70 | | 323 | 165 | 251 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 293 | 1809 | 1610 | | 1765 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.0 | 49.3 | 49.3 | 0.0 | 13.5 | 1.1 | | 3.8 | | 20.9 | 9.6 | 13.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.0 | 49.3 | 49.3 | 24.3 | 13.5 | 1.1 | | 3.8 | | 20.9 | 9.6 | 13.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 886 | 781 | 778 | 60 | 733 | 648 | | 425 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.596 | 1.090 | 1.092 | 0.275 | 0.612 | 0.037 | | 0.165 | | 0.893 | 0.456 | 0.421 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 233.2 | 1186 | 1188.9 | 30.7 | 263.6 | 19 | | 75.4 | | 434.1 | 197.8 | 233.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.3 | 47.4 | 47.6 | 1.2 | 10.5 | 0.8 | | 3.0 | | 17.4 | 7.9 | 9.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.8 | 35.4 | 35.4 | 60.0 | 43.6 | 21.7 | | 36.0 | | 46.8 | 42.3 | 28.3 |
| Incremental Delay ( $d_2$ ), s/veh | 1.1 | 59.6 | 60.4 | 11.0 | 3.8 | 0.1 | | 0.2 | | 23.7 | 1.3 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 28.9 | 95.0 | 95.7 | 71.0 | 47.4 | 21.8 | | 36.2 | | 70.5 | 43.5 | 29.0 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 79.6 | E | | 46.9 | D | | 36.2 | D | | 50.4 | D | |
| Intersection Delay, s/veh / LOS | 68.1 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 0.89 | A | 0.60 | A | 1.71 | B |

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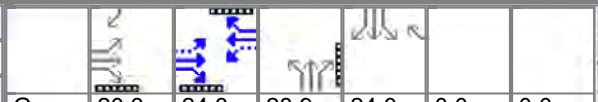
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

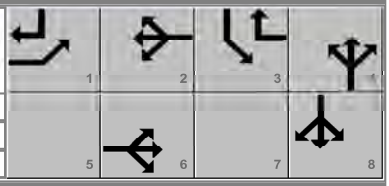


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 512 | 1635 | 15 | 16 | 435 | 23 | 39 | 11 | 18 | 468 | 6 | 261 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.0 | | | | | 5.8 | | 22.9 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.5 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.62 | | | | | 0.00 | | 1.00 |

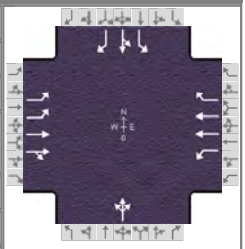
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 528 | 851 | 850 | 16 | 448 | 24 | | 70 | | 323 | 165 | 269 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 293 | 1809 | 1610 | | 1765 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.0 | 49.3 | 49.3 | 0.0 | 13.5 | 1.1 | | 3.8 | | 20.9 | 9.6 | 15.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.0 | 49.3 | 49.3 | 24.3 | 13.5 | 1.1 | | 3.8 | | 20.9 | 9.6 | 15.2 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 886 | 781 | 778 | 60 | 733 | 648 | | 425 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.596 | 1.090 | 1.092 | 0.275 | 0.612 | 0.037 | | 0.165 | | 0.893 | 0.456 | 0.453 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 233.2 | 1186 | 1188.9 | 30.7 | 263.6 | 19 | | 75.4 | | 434.1 | 197.8 | 250 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.3 | 47.4 | 47.6 | 1.2 | 10.5 | 0.8 | | 3.0 | | 17.4 | 7.9 | 10.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.8 | 35.4 | 35.4 | 60.0 | 43.6 | 21.7 | | 36.0 | | 46.8 | 42.3 | 28.7 |
| Incremental Delay ( $d_2$ ), s/veh | 1.1 | 59.6 | 60.4 | 11.0 | 3.8 | 0.1 | | 0.2 | | 23.7 | 1.3 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 28.9 | 95.0 | 95.7 | 71.0 | 47.4 | 21.8 | | 36.2 | | 70.5 | 43.5 | 29.4 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 79.6 | E | | 46.9 | D | | 36.2 | D | | 50.0 | D | |
| Intersection Delay, s/veh / LOS | 67.9 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 0.89 | A | 0.60 | A | 1.74 | B |

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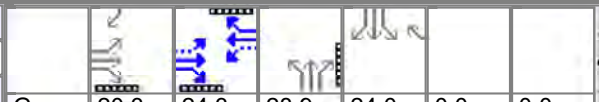
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

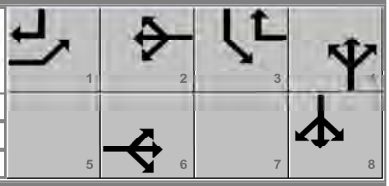


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 228 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 15.2 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.3 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.45 |

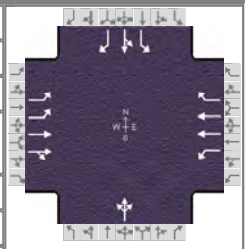
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 235 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.395 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 219.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 8.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.0 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.6 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 28.6 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.5 | D | |
| Intersection Delay, s/veh / LOS | 76.6 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.45 | A |

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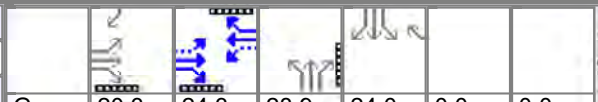
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

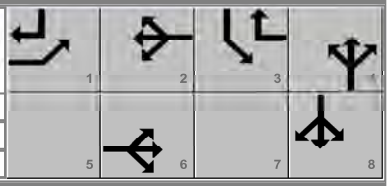


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 256 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 16.8 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.67 |

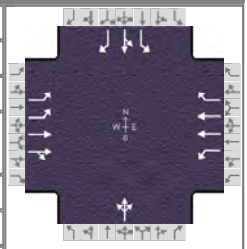
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 264 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.8 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.444 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 245.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 9.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.6 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 29.3 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.3 | D | |
| Intersection Delay, s/veh / LOS | 76.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.49 | A |

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# HCS7 Signalized Intersection Results Summary

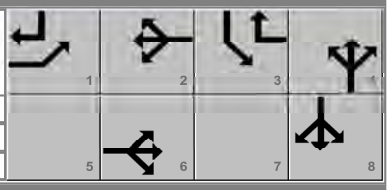
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 528 | 872 | 15 | 23 | 1008 | 82 | 33 | 14 | 13 | 275 | 20 | 240 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 15.5 | | | | | 5.3 | | 15.7 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.75 | | | | | 0.00 | | 0.50 |

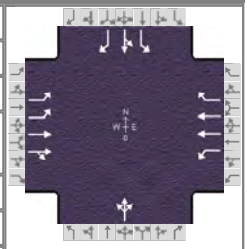
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 544 | 459 | 456 | 24 | 1039 | 85 | | 62 | | 190 | 114 | 247 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 620 | 1809 | 1610 | | 1782 | | 1810 | 1826 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.5 | 22.5 | 22.5 | 3.8 | 24.3 | 4.0 | | 3.3 | | 11.3 | 6.4 | 13.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.5 | 22.5 | 22.5 | 3.8 | 24.3 | 4.0 | | 3.3 | | 11.3 | 6.4 | 13.7 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 186 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.762 | 0.588 | 0.588 | 0.128 | 1.419 | 0.130 | | 0.144 | | 0.525 | 0.313 | 0.416 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 251.4 | 401.6 | 399.7 | 29.3 | 1170.4 | 70.7 | | 66.2 | | 224.6 | 133.4 | 230.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.1 | 16.1 | 16.0 | 1.2 | 46.8 | 2.8 | | 2.6 | | 9.0 | 5.3 | 9.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 29.4 | 27.5 | 27.5 | 39.7 | 47.9 | 22.6 | | 35.8 | | 42.9 | 41.0 | 28.2 |
| Incremental Delay ( $d_2$ ), s/veh | 4.8 | 3.2 | 3.2 | 1.4 | 196.3 | 0.4 | | 0.2 | | 1.9 | 0.7 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | 30.7 | 30.7 | 41.1 | 244.2 | 23.0 | | 36.0 | | 44.8 | 41.7 | 28.9 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 32.0 | C | | 223.7 | F | | 36.0 | D | | 37.0 | D | |
| Intersection Delay, s/veh / LOS | 101.3 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.69 | B | 1.43 | A | 0.59 | A | 1.40 | A |

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# HCS7 Signalized Intersection Results Summary

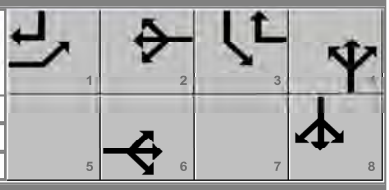
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 528 | 872 | 15 | 23 | 1008 | 82 | 33 | 14 | 13 | 275 | 20 | 268 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 15.5 | | | | | 5.3 | | 17.7 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 1.8 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.75 | | | | | 0.00 | | 0.79 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 544 | 459 | 456 | 24 | 1039 | 85 | | 62 | | 190 | 114 | 276 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 620 | 1809 | 1610 | | 1782 | | 1810 | 1826 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.5 | 22.5 | 22.5 | 3.8 | 24.3 | 4.0 | | 3.3 | | 11.3 | 6.4 | 15.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.5 | 22.5 | 22.5 | 3.8 | 24.3 | 4.0 | | 3.3 | | 11.3 | 6.4 | 15.7 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 186 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.762 | 0.588 | 0.588 | 0.128 | 1.419 | 0.130 | | 0.144 | | 0.525 | 0.313 | 0.465 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 251.4 | 401.6 | 399.7 | 29.3 | 1170.4 | 70.7 | | 66.2 | | 224.6 | 133.4 | 256.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.1 | 16.1 | 16.0 | 1.2 | 46.8 | 2.8 | | 2.6 | | 9.0 | 5.3 | 10.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 29.4 | 27.5 | 27.5 | 39.7 | 47.9 | 22.6 | | 35.8 | | 42.9 | 41.0 | 28.8 |
| Incremental Delay ( $d_2$ ), s/veh | 4.8 | 3.2 | 3.2 | 1.4 | 196.3 | 0.4 | | 0.2 | | 1.9 | 0.7 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | 30.7 | 30.7 | 41.1 | 244.2 | 23.0 | | 36.0 | | 44.8 | 41.7 | 29.6 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 32.0 | C | | 223.7 | F | | 36.0 | D | | 36.9 | D | |
| Intersection Delay, s/veh / LOS | 100.7 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.69 | B | 1.43 | A | 0.59 | A | 1.45 | A |

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# HCS7 Two-Way Stop-Control Report

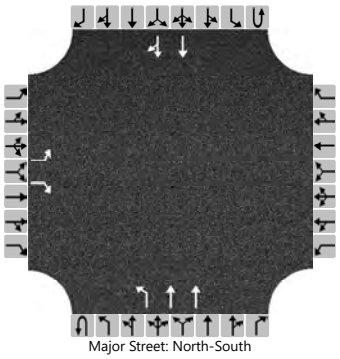
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 55 | | 20 | | | | | 0 | 33 | 188 | | | | 536 | 30 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 62 | | 22 | | | | | | 37 | | | | | | |
| Capacity, c (veh/h) | | 473 | | 675 | | | | | | 937 | | | | | | |
| v/c Ratio | | 0.13 | | 0.03 | | | | | | 0.04 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.4 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 13.7 | | 10.5 | | | | | | 9.0 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.9 | | | | | | | | 1.3 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

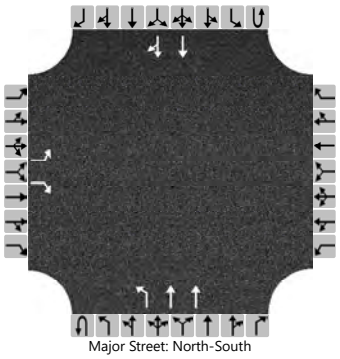
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 90 | | 44 | | | | | 0 | 55 | 188 | | | | 536 | 97 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 101 | | 49 | | | | | | 62 | | | | | | |
| Capacity, c (veh/h) | | 448 | | 638 | | | | | | 877 | | | | | | |
| v/c Ratio | | 0.23 | | 0.08 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.9 | | 0.3 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 15.4 | | 11.1 | | | | | | 9.4 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.0 | | | | | | | | 2.1 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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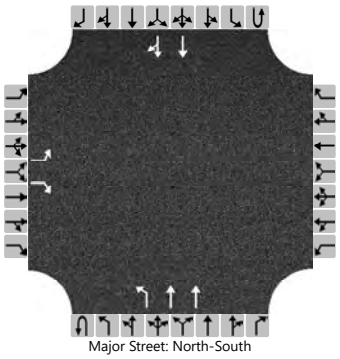
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2025 |
| Time Analyzed | Future - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 58 | | 21 | | | | | 0 | 35 | 447 | | | | 1006 | 32 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 65 | | 24 | | | | | | 39 | | | | | | |
| Capacity, c (veh/h) | | 251 | | 453 | | | | | | 589 | | | | | | |
| v/c Ratio | | 0.26 | | 0.05 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.0 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 24.3 | | 13.4 | | | | | | 11.5 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 21.4 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | | | | | | | |

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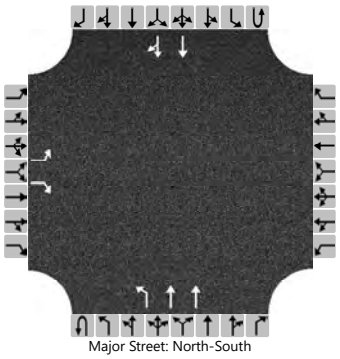
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2025 |
| Time Analyzed | Future + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 93 | | 45 | | | | | 0 | 57 | 447 | | | | 1006 | 99 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 104 | | 51 | | | | | | 64 | | | | | | |
| Capacity, c (veh/h) | | 238 | | 428 | | | | | | 551 | | | | | | |
| v/c Ratio | | 0.44 | | 0.12 | | | | | | 0.12 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 2.1 | | 0.4 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 31.4 | | 14.5 | | | | | | 12.4 | | | | | | |
| Level of Service (LOS) | | D | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 25.9 | | | | | | | | 1.4 | | | | | | |
| Approach LOS | | D | | | | | | | | | | | | | | |

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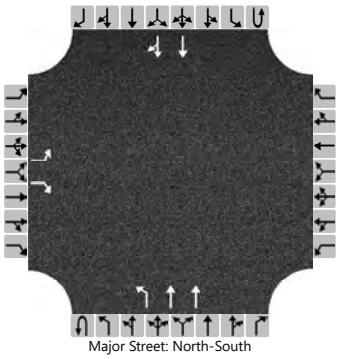
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 38 | | 24 | | | | | 0 | 33 | 345 | | | | 235 | 40 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 47 | | 30 | | | | | | 41 | | | | | | |
| Capacity, c (veh/h) | | 611 | | 841 | | | | | | 1209 | | | | | | |
| v/c Ratio | | 0.08 | | 0.04 | | | | | | 0.03 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.2 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 11.4 | | 9.4 | | | | | | 8.1 | | | | | | |
| Level of Service (LOS) | | B | | A | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 10.6 | | | | | | | | 0.7 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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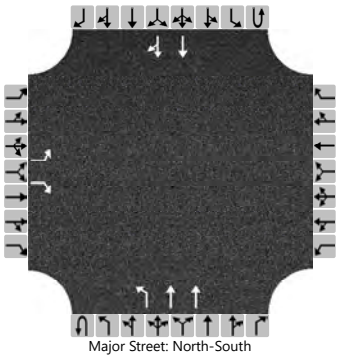
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 102 | | 67 | | | | | 0 | 68 | 345 | | | | 235 | 144 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 126 | | 83 | | | | | | 84 | | | | | | |
| Capacity, c (veh/h) | | 532 | | 765 | | | | | | 1083 | | | | | | |
| v/c Ratio | | 0.24 | | 0.11 | | | | | | 0.08 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.9 | | 0.4 | | | | | | 0.3 | | | | | | |
| Control Delay (s/veh) | | 13.9 | | 10.3 | | | | | | 8.6 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.4 | | | | | | | | 1.4 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

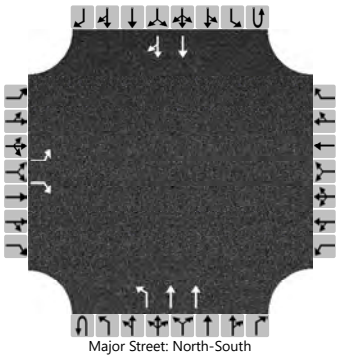
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2025 |
| Time Analyzed | Future - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 40 | | 25 | | | | | 0 | 35 | 786 | | | | 538 | 42 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 49 | | 31 | | | | | | 43 | | | | | | |
| Capacity, c (veh/h) | | 382 | | 636 | | | | | | 874 | | | | | | |
| v/c Ratio | | 0.13 | | 0.05 | | | | | | 0.05 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.4 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 15.8 | | 11.0 | | | | | | 9.3 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.0 | | | | | | | | 0.4 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

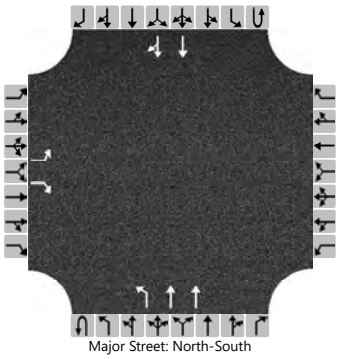
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2025 |
| Time Analyzed | Future + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes



Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 104 | | 68 | | | | | 0 | 70 | 786 | | | | 538 | 146 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

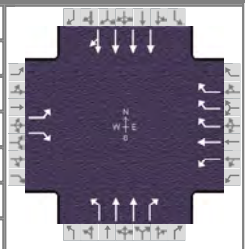
## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 128 | | 84 | | | | | | 86 | | | | | | |
| Capacity, c (veh/h) | | 333 | | 577 | | | | | | 781 | | | | | | |
| v/c Ratio | | 0.39 | | 0.15 | | | | | | 0.11 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.8 | | 0.5 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 22.4 | | 12.3 | | | | | | 10.2 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 18.4 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | | | | | | | |

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# HCS7 Signalized Intersection Results Summary

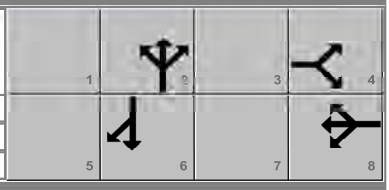
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 77 | 140 | 273 | 771 | 28 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.5 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.07 | | 0.70 | | | | |

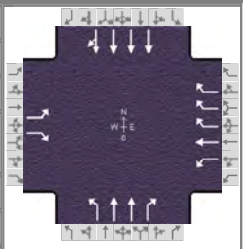
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 83 | 151 | 294 | 829 | 30 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 1.6 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 4.0 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.319 | 0.307 | 0.570 | 0.715 | 0.062 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 72.3 | 112 | 229.7 | 228.3 | 19.9 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 2.9 | 4.5 | 9.2 | 9.1 | 0.8 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 33.4 | 26.1 | 28.3 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 0.7 | 0.4 | 1.5 | 2.1 | 0.2 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 34.1 | 26.4 | 29.8 | 31.8 | 18.9 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | C | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.2 | | C | 30.7 | | C | 13.7 | | B | 17.5 | | B |
| Intersection Delay, s/veh / LOS | 26.1 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.59 | C | 0.81 | A | 0.61 | A |

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# HCS7 Signalized Intersection Results Summary

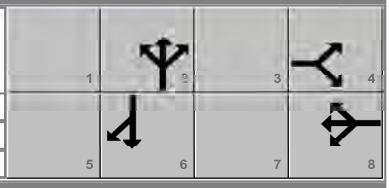
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 101 | 140 | 292 | 771 | 32 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 7.5 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.16 | | 0.71 | | | | |

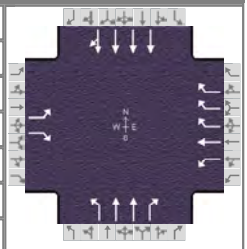
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 109 | 151 | 314 | 829 | 34 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 5.5 | 6.0 | 13.0 | 15.8 | 1.8 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 5.5 | 6.0 | 13.0 | 15.8 | 4.2 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.419 | 0.307 | 0.610 | 0.715 | 0.071 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 97 | 112 | 247 | 228.3 | 22.8 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 3.9 | 4.5 | 9.9 | 9.1 | 0.9 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 34.0 | 26.1 | 28.6 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 1.1 | 0.4 | 2.1 | 2.1 | 0.3 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 35.0 | 26.4 | 30.7 | 31.8 | 19.0 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | D | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.7 | | C | 30.9 | | C | 13.8 | | B | 17.5 | | B |
| Intersection Delay, s/veh / LOS | 26.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.62 | C | 0.81 | A | 0.61 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

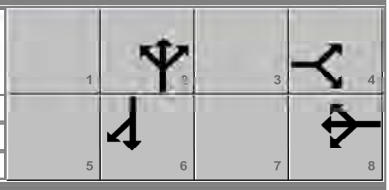


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 100 | | 81 | 147 | 290 | 983 | 29 | 304 | 97 | | 327 | 39 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.8 | | 23.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.09 | | 1.00 | | | | |

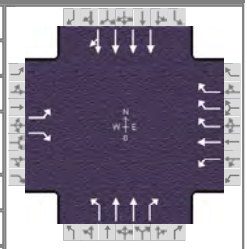
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 108 | | 87 | 158 | 312 | 1057 | 31 | 327 | 104 | | 297 | 96 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1006 | 1809 | | | 1900 | 1762 |
| Queue Service Time ( $g_s$ ), s | 4.8 | | 4.3 | 6.3 | 12.9 | 21.5 | 1.9 | 5.4 | | | 3.0 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | | 4.3 | 6.3 | 12.9 | 21.5 | 5.0 | 5.4 | | | 3.0 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 438 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | | 0.336 | 0.322 | 0.605 | 0.912 | 0.071 | 0.231 | | | 0.133 | 0.140 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 94.6 | | 76.4 | 118.3 | 245.4 | 320.3 | 21.2 | 105.1 | | | 60.2 | 61.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.8 | | 3.1 | 4.7 | 9.8 | 12.8 | 0.8 | 4.2 | | | 2.4 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 33.5 | 26.2 | 28.6 | 31.8 | 19.3 | 18.3 | | | 17.6 | 17.6 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 0.8 | 0.4 | 2.0 | 10.9 | 0.3 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.4 | | 34.2 | 26.6 | 30.6 | 42.6 | 19.6 | 18.7 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | C | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.4 | | C | 38.5 | | D | 14.6 | | B | 17.8 | | B |
| Intersection Delay, s/veh / LOS | 30.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.01 | C | 0.87 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

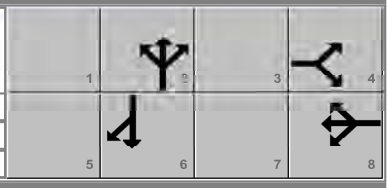
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 100 | | 105 | 147 | 309 | 983 | 33 | 304 | 97 | | 327 | 39 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 7.7 | | 23.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.19 | | 1.00 | | | | |

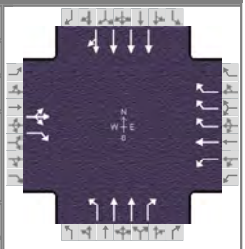
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 108 | | 113 | 158 | 332 | 1057 | 35 | 327 | 104 | | 297 | 96 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1006 | 1809 | | | 1900 | 1762 |
| Queue Service Time ( $g_s$ ), s | 4.8 | | 5.7 | 6.3 | 13.9 | 21.5 | 2.1 | 5.4 | | | 3.0 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | | 5.7 | 6.3 | 13.9 | 21.5 | 5.3 | 5.4 | | | 3.0 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 438 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | | 0.435 | 0.322 | 0.645 | 0.912 | 0.081 | 0.231 | | | 0.133 | 0.140 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 94.6 | | 101.2 | 118.3 | 263.3 | 320.3 | 24.2 | 105.1 | | | 60.2 | 61.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.8 | | 4.0 | 4.7 | 10.5 | 12.8 | 1.0 | 4.2 | | | 2.4 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 34.1 | 26.2 | 29.0 | 31.8 | 19.4 | 18.3 | | | 17.6 | 17.6 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 1.2 | 0.4 | 2.8 | 10.9 | 0.4 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.4 | | 35.2 | 26.6 | 31.7 | 42.6 | 19.7 | 18.7 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | D | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.8 | | C | 38.7 | | D | 14.6 | | B | 17.8 | | B |
| Intersection Delay, s/veh / LOS | 30.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.04 | C | 0.87 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

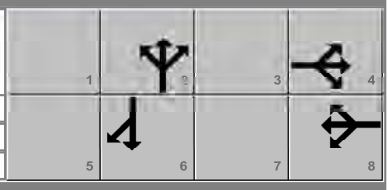
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 28, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM (Improvements) | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 100 | 0 | 105 | 147 | 309 | 983 | 33 | 304 | 97 | | 327 | 39 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 11.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 8.9 | | 23.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.3 | | 0.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.42 | | 1.00 | | | | |

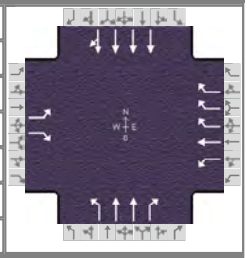
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | 145 | 76 | 158 | 332 | 1057 | 35 | 327 | 104 | | 297 | 96 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1758 | 1610 | 1810 | 1900 | 1425 | 1006 | 1809 | | | 1900 | 1762 |
| Queue Service Time ( $g_s$ ), s | | 6.9 | 3.7 | 6.3 | 13.9 | 21.5 | 2.1 | 5.4 | | | 3.0 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 6.9 | 3.7 | 6.3 | 13.9 | 21.5 | 5.3 | 5.4 | | | 3.0 | 3.2 |
| Green Ratio ( *g/C* ) | | 0.16 | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | | 283 | 259 | 491 | 515 | 1159 | 438 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.511 | 0.292 | 0.322 | 0.645 | 0.912 | 0.081 | 0.231 | | | 0.133 | 0.140 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | 139 | 65.7 | 118.3 | 263.3 | 320.3 | 24.2 | 105.1 | | | 60.2 | 61.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 5.6 | 2.6 | 4.7 | 10.5 | 12.8 | 1.0 | 4.2 | | | 2.4 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 36.3 | 33.2 | 26.2 | 29.0 | 31.8 | 19.4 | 18.3 | | | 17.6 | 17.6 |
| Incremental Delay ( $d_2$ ), s/veh | | 1.5 | 0.6 | 0.4 | 2.8 | 10.9 | 0.4 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 37.8 | 33.8 | 26.6 | 31.7 | 42.6 | 19.7 | 18.7 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | | D | C | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 36.5 | D | | 38.7 | D | | 14.6 | B | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 31.1 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | 0.85 | A | 3.04 | C | 0.87 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

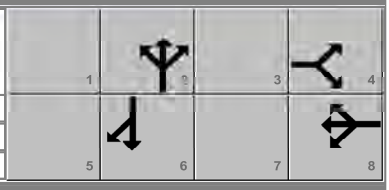


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 284 | 193 | 83 | 171 | 7 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

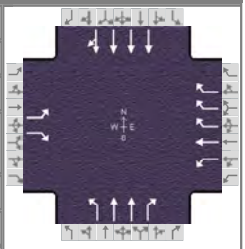
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 302 | 205 | 88 | 182 | 7 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 0.9 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 10.2 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.165 | 0.419 | 0.171 | 0.157 | 0.032 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 516.2 | 158.5 | 63.1 | 42.7 | 5.9 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 20.6 | 6.3 | 2.5 | 1.7 | 0.2 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.1 | 25.0 | 23.1 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 107.8 | 0.6 | 0.2 | 0.1 | 0.3 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 145.6 | 27.5 | 25.2 | 25.0 | 23.4 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 127.9 | | F | 26.2 | | C | 7.9 | | A | 20.2 | | C |
| Intersection Delay, s/veh / LOS | 36.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.27 | A | 0.76 | A | 0.93 | A |

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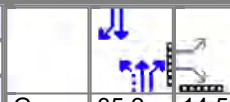
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

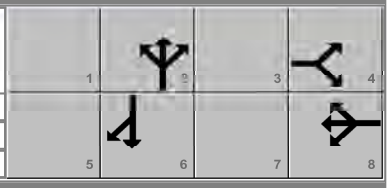


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 327 | 193 | 112 | 171 | 13 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.7 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

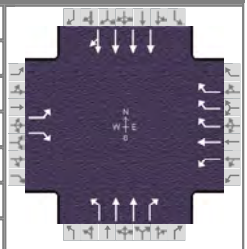
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 348 | 205 | 119 | 182 | 14 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 4.4 | 2.9 | 1.7 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 4.4 | 2.9 | 10.9 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.341 | 0.419 | 0.231 | 0.157 | 0.059 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 715.9 | 158.5 | 86.5 | 42.7 | 11.1 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 28.6 | 6.3 | 3.5 | 1.7 | 0.4 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.5 | 25.0 | 23.4 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 177.1 | 0.6 | 0.2 | 0.1 | 0.5 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 214.8 | 27.5 | 25.7 | 25.0 | 23.9 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 189.5 | | F | 26.2 | | C | 8.2 | | A | 20.2 | | C |
| Intersection Delay, s/veh / LOS | 49.3 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.32 | A | 0.77 | A | 0.93 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

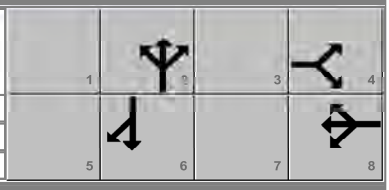


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | | 298 | 203 | 88 | 58 | 7 | 68 | 183 | | 1389 | 98 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 35.2 | | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | | | | | |
| Yellow | 3.6 | | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | | | | | |
| Red | 1.2 | | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.9 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.1 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

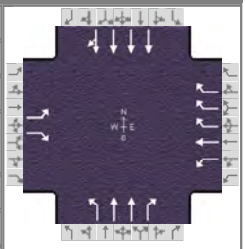
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 60 | | 317 | 216 | 94 | 62 | 7 | 72 | 195 | | 1200 | 382 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 328 | 1809 | | | 1900 | 1811 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 8.9 | 3.4 | 1.0 | 1.6 | 1.1 | | | 14.6 | 14.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 8.9 | 3.4 | 1.0 | 16.3 | 1.1 | | | 14.6 | 14.6 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 155 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.204 | | 1.222 | 0.440 | 0.182 | 0.053 | 0.048 | 0.051 | | | 0.538 | 0.539 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 50.7 | | 578.3 | 167.9 | 67 | 14.1 | 6.8 | 21.5 | | | 269 | 272.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.0 | | 23.1 | 6.7 | 2.7 | 0.6 | 0.3 | 0.9 | | | 10.8 | 10.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.1 | 25.1 | 24.3 | 27.4 | 17.0 | | | 21.1 | 21.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 129.4 | 0.6 | 0.2 | 0.0 | 0.6 | 0.1 | | | 0.9 | 2.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 167.2 | 27.8 | 25.3 | 24.3 | 28.0 | 17.1 | 0.0 | | 22.1 | 24.1 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 146.0 | | F | 26.6 | | C | 5.3 | | A | 22.6 | | C |
| Intersection Delay, s/veh / LOS | 39.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.10 | A | 0.71 | A | 1.14 | A |

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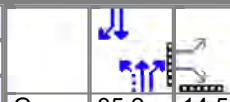
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

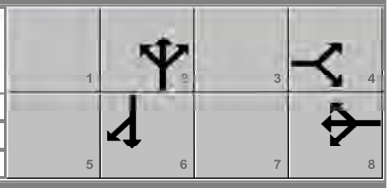


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | | 341 | 203 | 117 | 58 | 13 | 68 | 183 | | 1389 | 98 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.9 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

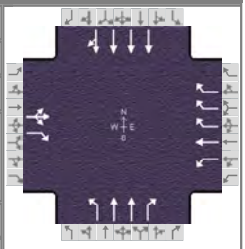
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 60 | | 363 | 216 | 124 | 62 | 14 | 72 | 195 | | 1200 | 382 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 328 | 1809 | | | 1900 | 1811 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 8.9 | 4.6 | 1.0 | 3.1 | 1.1 | | | 14.6 | 14.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 8.9 | 4.6 | 1.0 | 17.7 | 1.1 | | | 14.6 | 14.6 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 155 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.204 | | 1.398 | 0.440 | 0.242 | 0.053 | 0.089 | 0.051 | | | 0.538 | 0.539 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 50.7 | | 785.1 | 167.9 | 90.9 | 14.1 | 13 | 21.5 | | | 269 | 272.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.0 | | 31.4 | 6.7 | 3.6 | 0.6 | 0.5 | 0.9 | | | 10.8 | 10.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.1 | 25.6 | 24.3 | 28.0 | 17.0 | | | 21.1 | 21.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 201.0 | 0.6 | 0.2 | 0.0 | 1.1 | 0.1 | | | 0.9 | 2.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 238.7 | 27.8 | 25.8 | 24.3 | 29.1 | 17.1 | 0.0 | | 22.1 | 24.1 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 209.7 | | F | 26.6 | | C | 5.8 | | A | 22.6 | | C |
| Intersection Delay, s/veh / LOS | 50.8 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.15 | A | 0.72 | A | 1.14 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 28, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM (Improvements) | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |

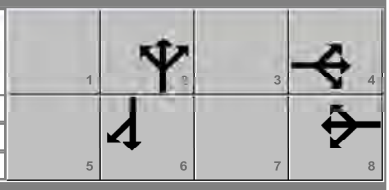


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | 0 | 341 | 203 | 117 | 58 | 13 | 68 | 183 | | 1389 | 98 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 11.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 15.4 | | 10.9 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

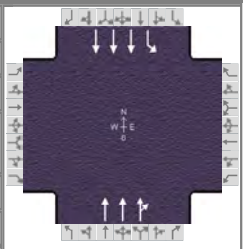
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | 179 | 243 | 216 | 124 | 62 | 14 | 72 | 195 | | 1200 | 382 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1676 | 1610 | 1810 | 1900 | 1425 | 328 | 1809 | | | 1900 | 1811 |
| Queue Service Time ( $g_s$ ), s | | 9.4 | 13.4 | 8.9 | 4.6 | 1.0 | 3.1 | 1.1 | | | 14.6 | 14.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 9.4 | 13.4 | 8.9 | 4.6 | 1.0 | 17.7 | 1.1 | | | 14.6 | 14.6 |
| Green Ratio ( *g/C* ) | | 0.16 | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | | 270 | 259 | 491 | 515 | 1159 | 155 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.664 | 0.937 | 0.440 | 0.242 | 0.053 | 0.089 | 0.051 | | | 0.538 | 0.539 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | 201.4 | 313.6 | 167.9 | 90.9 | 14.1 | 13 | 21.5 | | | 269 | 272.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 8.1 | 12.5 | 6.7 | 3.6 | 0.6 | 0.5 | 0.9 | | | 10.8 | 10.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 40.2 | 37.3 | 27.1 | 25.6 | 24.3 | 28.0 | 17.0 | | | 21.1 | 21.1 |
| Incremental Delay ( $d_2$ ), s/veh | | 6.0 | 39.1 | 0.6 | 0.2 | 0.0 | 1.1 | 0.1 | | | 0.9 | 2.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 46.2 | 76.4 | 27.8 | 25.8 | 24.3 | 29.1 | 17.1 | 0.0 | | 22.1 | 24.1 |
| Level of Service (LOS) | | D | E | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 63.6 | E | | 26.6 | C | | 5.8 | A | | 22.6 | C | |
| Intersection Delay, s/veh / LOS | 27.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | 1.18 | A | 1.15 | A | 0.72 | A | 1.14 | A |

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# HCS7 Signalized Intersection Results Summary

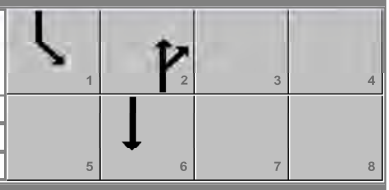
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 366 | 114 | 116 | 265 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

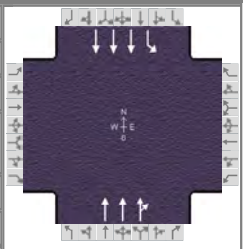
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 345 | 160 | 122 | 279 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1674 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 988 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.154 | 0.162 | 0.266 | 0.058 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.4 | 37.4 | 58.4 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.3 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.5 | 5.6 | 17.9 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.0 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 5.6 | | A |
| Intersection Delay, s/veh / LOS | 5.7 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.71 | A |

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# HCS7 Signalized Intersection Results Summary

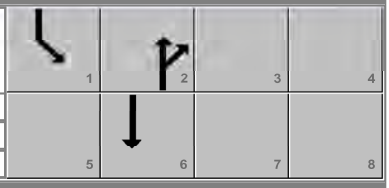
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 370 | 114 | 128 | 276 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.6 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

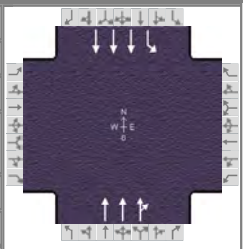
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 348 | 162 | 135 | 291 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1676 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.5 | 2.6 | 3.6 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.5 | 2.6 | 3.6 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 989 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.155 | 0.163 | 0.294 | 0.061 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.9 | 37.9 | 64.9 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.6 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.6 | 5.6 | 18.1 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.2 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 5.9 | | A |
| Intersection Delay, s/veh / LOS | 5.8 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.72 | A |

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# HCS7 Signalized Intersection Results Summary

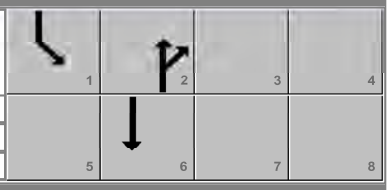
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 435 | 120 | 152 | 306 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.3 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

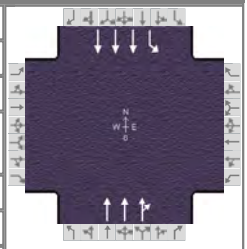
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 399 | 185 | 160 | 322 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1692 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.9 | 3.0 | 4.3 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.9 | 3.0 | 4.3 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 998 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.178 | 0.185 | 0.349 | 0.067 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 44.1 | 44 | 78.4 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.1 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.6 | 5.7 | 18.3 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.5 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.3 | | A |
| Intersection Delay, s/veh / LOS | 6.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.81 | A | 0.75 | A |

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# HCS7 Signalized Intersection Results Summary

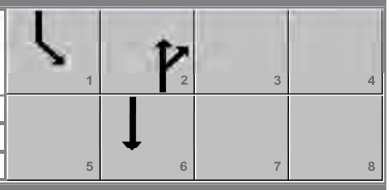
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 439 | 120 | 164 | 317 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.7 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

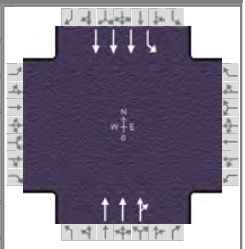
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 402 | 186 | 173 | 334 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1693 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.9 | 3.0 | 4.7 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.9 | 3.0 | 4.7 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 999 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.179 | 0.187 | 0.377 | 0.070 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 44.4 | 44.3 | 85.2 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.4 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.6 | 5.7 | 18.5 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.7 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.5 | | A |
| Intersection Delay, s/veh / LOS | 6.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.81 | A | 0.77 | A |

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# HCS7 Signalized Intersection Results Summary

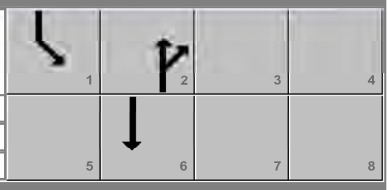
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 28, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM (Improvements) | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 439 | 120 | 164 | 317 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.2 | 30.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 35.0 | 25.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.3 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

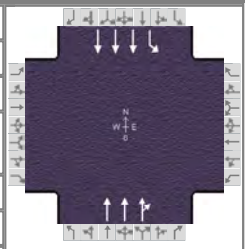
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 402 | 186 | 173 | 334 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1693 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.5 | 3.7 | 4.2 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.5 | 3.7 | 4.2 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.51 | 0.51 | 0.34 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 1925 | 858 | 609 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.209 | 0.217 | 0.283 | 0.070 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 59 | 58.4 | 72.8 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 2.4 | 2.3 | 2.9 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 8.2 | 8.2 | 14.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.6 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 8.4 | 8.8 | 14.7 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 8.5 | | A | 5.2 | | A |
| Intersection Delay, s/veh / LOS | 7.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.36 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.81 | A | 0.77 | A |

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# HCS7 Signalized Intersection Results Summary

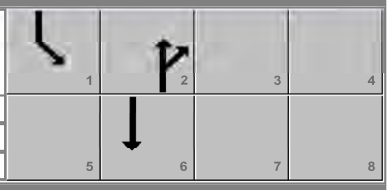
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 303 | 70 | 385 | 639 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 15.1 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

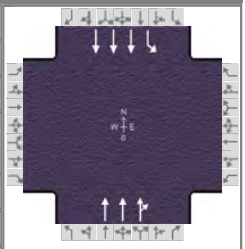
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 269 | 128 | 410 | 680 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1720 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1015 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.120 | 0.126 | 0.893 | 0.142 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 28.6 | 29.2 | 303.1 | 1.2 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.2 | 12.1 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 21.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 19.0 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 40.6 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 15.4 | | B |
| Intersection Delay, s/veh / LOS | 12.8 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.09 | A |

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# HCS7 Signalized Intersection Results Summary

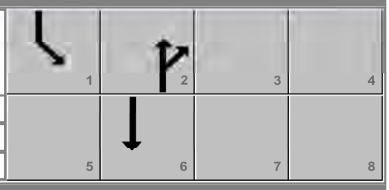
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 309 | 70 | 407 | 659 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 16.1 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

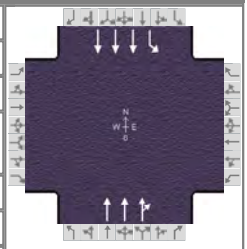
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 273 | 130 | 433 | 701 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1723 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 14.1 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 14.1 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1016 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.122 | 0.128 | 0.945 | 0.147 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 29 | 29.7 | 353.4 | 1.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.2 | 1.2 | 14.1 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.5 | 22.0 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 28.2 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 50.2 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 19.3 | | B |
| Intersection Delay, s/veh / LOS | 15.7 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.11 | A |

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# HCS7 Signalized Intersection Results Summary

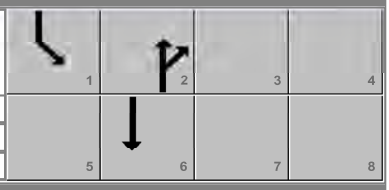
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 249 | 74 | 581 | 853 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

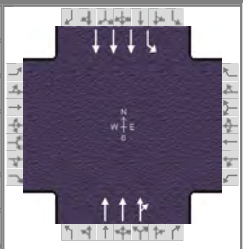
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 233 | 111 | 618 | 907 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1684 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.6 | 1.7 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.6 | 1.7 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 994 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.104 | 0.111 | 1.348 | 0.190 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 24.5 | 24.9 | 1059.1 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.0 | 1.0 | 42.4 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 170.7 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.6 | 193.1 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.5 | | A | 78.4 | | E |
| Intersection Delay, s/veh / LOS | 65.0 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.68 | A | 1.33 | A |

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# HCS7 Signalized Intersection Results Summary

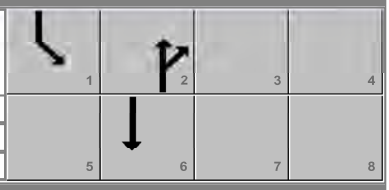
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 255 | 74 | 603 | 873 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

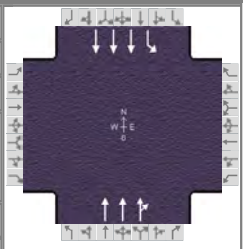
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 237 | 113 | 641 | 929 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1688 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.6 | 1.8 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.6 | 1.8 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 996 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.106 | 0.113 | 1.399 | 0.194 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 24.9 | 25.4 | 1170.1 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.0 | 1.0 | 46.8 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 192.6 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.6 | 215.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.5 | | A | 88.0 | | F |
| Intersection Delay, s/veh / LOS | 73.0 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.68 | A | 1.35 | A |

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# HCS7 Signalized Intersection Results Summary

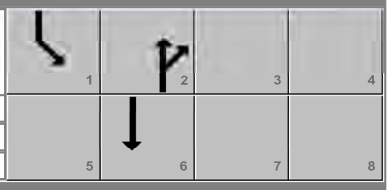
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM (Improvements) | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 255 | 74 | 603 | 873 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.2 | 30.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 35.0 | 25.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 22.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

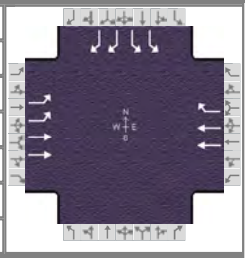
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 237 | 113 | 641 | 929 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1688 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.0 | 2.1 | 20.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.0 | 2.1 | 20.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.51 | 0.51 | 0.34 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 1925 | 855 | 609 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.123 | 0.132 | 1.053 | 0.194 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 33.2 | 33.6 | 594.9 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.3 | 1.3 | 23.8 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 7.8 | 7.8 | 19.9 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 51.2 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 7.9 | 8.1 | 71.1 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 8.0 | | A | 29.2 | | C |
| Intersection Delay, s/veh / LOS | 25.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.36 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.68 | A | 1.35 | A |

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# HCS7 Signalized Intersection Results Summary

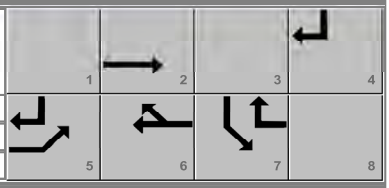
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 139 | | | | 120 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 | |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( *g s* ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( *g e* ), s | 1.0 | 0.0 | | 0.0 | | | | 2.1 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

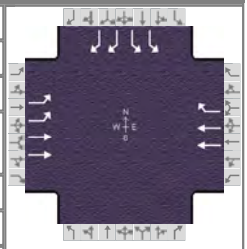
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 153 | | | | 132 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.134 | | | | 0.089 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 53.9 | | | | 50.4 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.0 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.0 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.2 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.0 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.2 | C | | 0.0 | | | 15.7 | B | |
| Intersection Delay, s/veh / LOS | 33.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.91 | A | | | | F |

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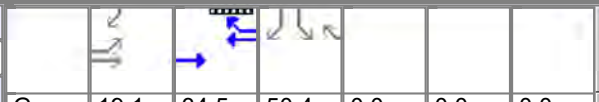
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

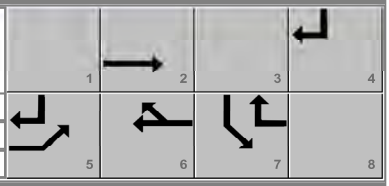


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 143 | | | | 131 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | | | 2.2 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

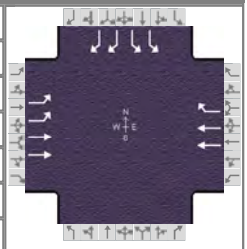
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 157 | | | | 144 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.138 | | | | 0.098 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 55.5 | | | | 55.2 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.2 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.0 | | 11.3 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.3 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.1 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.1 | C | | 0.0 | | | 15.9 | B | |
| Intersection Delay, s/veh / LOS | 32.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.92 | A | | | | F |

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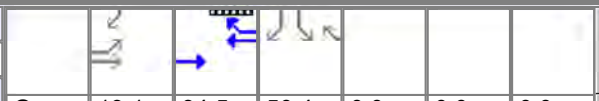
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

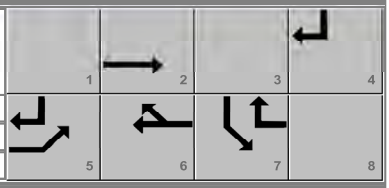


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 375 | 1596 | | | 370 | 179 | | | | 151 | | 156 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 15.4 | | | | | | | 5.4 |
| Green Extension Time ( *g e* ), s | 0.9 | 0.0 | | 0.0 | | | | 2.4 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

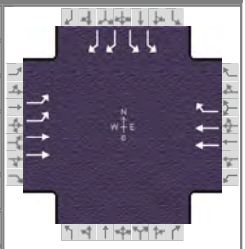
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 412 | 1754 | | | 407 | 197 | | | | 166 | | 171 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 13.4 | 56.9 | | | 10.8 | 4.9 | | | | 3.4 | | 3.2 |
| Cycle Queue Clearance Time ( *g c* ), s | 13.4 | 56.9 | | | 10.8 | 4.9 | | | | 3.4 | | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.737 | 0.978 | | | 0.391 | 0.173 | | | | 0.112 | | 0.104 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 258.4 | 900.3 | | | 212.8 | 71.6 | | | | 64 | | 45.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.3 | 36.0 | | | 8.5 | 2.9 | | | | 2.6 | | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 48.1 | 29.6 | | | 34.3 | 5.8 | | | | 21.2 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 5.5 | 16.6 | | | 1.1 | 0.3 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 53.5 | 46.2 | | | 35.4 | 6.2 | | | | 21.2 | | 11.3 |
| Level of Service (LOS) | D | D | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 47.6 | D | | 25.9 | C | | 0.0 | | | 16.2 | B | |
| Intersection Delay, s/veh / LOS | 40.0 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.27 | B | 0.99 | A | | | | F |

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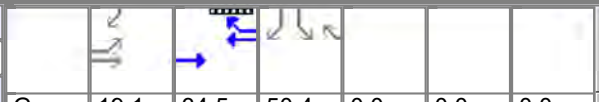
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2025 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

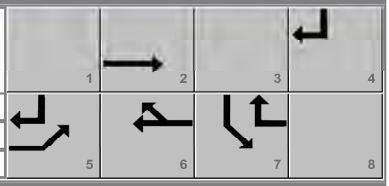


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 375 | 1596 | | | 370 | 183 | | | | 162 | | 156 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.4 | | | | | | | 5.7 |
| Green Extension Time ( $g_e$ ), s | 0.9 | 0.0 | | 0.0 | | | | 2.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

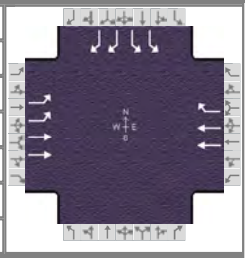
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 412 | 1754 | | | 407 | 201 | | | | 178 | | 171 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 13.4 | 56.9 | | | 10.8 | 5.0 | | | | 3.7 | | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.4 | 56.9 | | | 10.8 | 5.0 | | | | 3.7 | | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.737 | 0.978 | | | 0.391 | 0.177 | | | | 0.121 | | 0.104 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 258.4 | 900.3 | | | 212.8 | 73.4 | | | | 69 | | 45.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.3 | 36.0 | | | 8.5 | 2.9 | | | | 2.8 | | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 48.1 | 29.6 | | | 34.3 | 5.9 | | | | 21.3 | | 11.3 |
| Incremental Delay ( $d_2$ ), s/veh | 5.5 | 16.6 | | | 1.1 | 0.3 | | | | 0.1 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 53.5 | 46.2 | | | 35.4 | 6.2 | | | | 21.3 | | 11.3 |
| Level of Service (LOS) | D | D | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 47.6 | D | | 25.8 | C | | 0.0 | | | 16.4 | B | |
| Intersection Delay, s/veh / LOS | 39.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.27 | B | 0.99 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

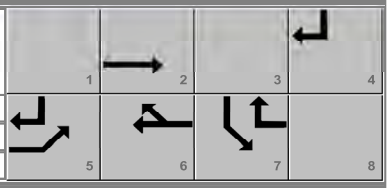
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 204 | | | | 347 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 | |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 7.6 | | | | | | | 10.3 |
| Green Extension Time ( *g e* ), s | 0.7 | 0.0 | | 0.0 | | | | 5.3 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

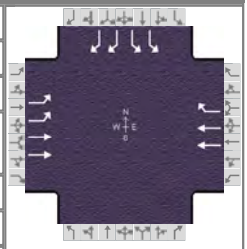
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 219 | | | | 373 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Cycle Queue Clearance Time ( *g c* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.193 | | | | 0.253 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 81 | | | | 153.7 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.2 | | | | 6.1 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 44.8 | 21.1 | | | 36.3 | 5.9 | | | | 22.6 | | 12.0 |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.3 | | | | 22.7 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.7 | C | | 0.0 | | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.15 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

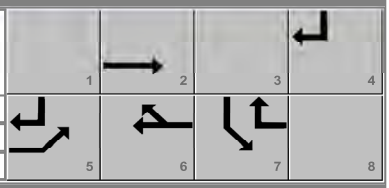
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 210 | | | | 367 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 | |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 7.6 | | | | | | | 10.8 |
| Green Extension Time ( $g_e$ ), s | 0.7 | 0.0 | | 0.0 | | | | 5.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

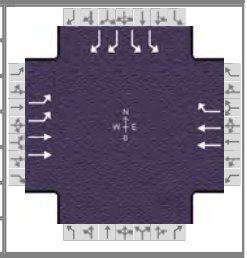
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 226 | | | | 395 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.198 | | | | 0.267 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 83.7 | | | | 163.8 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.3 | | | | 6.6 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.8 | 21.1 | | | 36.3 | 6.0 | | | | 22.7 | | 12.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.4 | | | | 22.9 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.5 | C | | 0.0 | | | 18.0 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.16 | A | | | | F |

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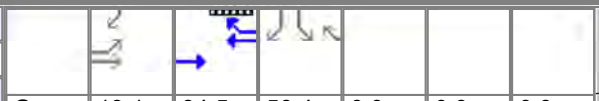
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

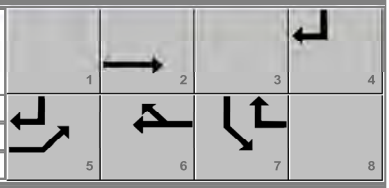


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 121 | 1005 | | | 638 | 207 | | | | 544 | | 315 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.9 | | | | | | | 15.9 |
| Green Extension Time ( $g_e$ ), s | 0.5 | 0.0 | | 0.0 | | | | 7.3 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

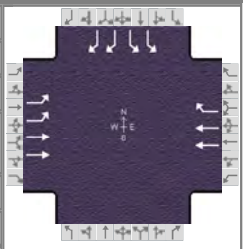
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 130 | 1081 | | | 686 | 223 | | | | 585 | | 339 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 3.9 | 25.8 | | | 20.0 | 5.6 | | | | 13.9 | | 6.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.9 | 25.8 | | | 20.0 | 5.6 | | | | 13.9 | | 6.8 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.233 | 0.602 | | | 0.660 | 0.195 | | | | 0.396 | | 0.205 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 76.8 | 408.7 | | | 354.4 | 82.5 | | | | 241.9 | | 95.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 16.3 | | | 14.2 | 3.3 | | | | 9.7 | | 3.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.1 | 21.7 | | | 37.6 | 6.0 | | | | 24.2 | | 12.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 1.5 | | | 3.3 | 0.4 | | | | 0.2 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 23.3 | | | 40.9 | 6.3 | | | | 24.5 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.5 | C | | 32.4 | C | | 0.0 | | | 19.9 | B | |
| Intersection Delay, s/veh / LOS | 25.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.49 | A | 1.24 | A | | | | F |

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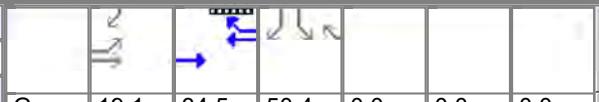
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2025 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

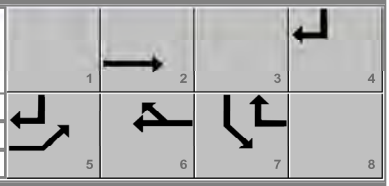


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 121 | 1005 | | | 638 | 213 | | | | 564 | | 315 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.9 | | | | | | | 16.5 |
| Green Extension Time ( $g_e$ ), s | 0.5 | 0.0 | | 0.0 | | | | 7.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

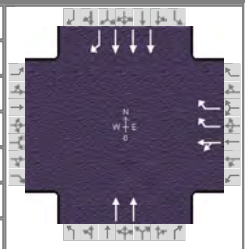
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 130 | 1081 | | | 686 | 229 | | | | 606 | | 339 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 3.9 | 25.8 | | | 20.0 | 5.8 | | | | 14.5 | | 6.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.9 | 25.8 | | | 20.0 | 5.8 | | | | 14.5 | | 6.8 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.233 | 0.602 | | | 0.660 | 0.201 | | | | 0.411 | | 0.205 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 76.8 | 408.7 | | | 354.4 | 85.2 | | | | 250.7 | | 95.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 16.3 | | | 14.2 | 3.4 | | | | 10.0 | | 3.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.1 | 21.7 | | | 37.6 | 6.0 | | | | 24.4 | | 12.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 1.5 | | | 3.3 | 0.4 | | | | 0.3 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 23.3 | | | 40.9 | 6.4 | | | | 24.7 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.5 | C | | 32.2 | C | | 0.0 | | | 20.2 | C | |
| Intersection Delay, s/veh / LOS | 25.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.49 | A | 1.24 | A | | | | F |

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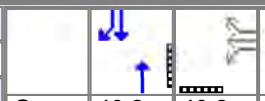
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

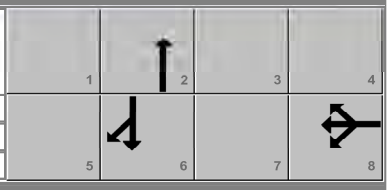


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 109 | 1800 | | 774 | | | 2181 | 196 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

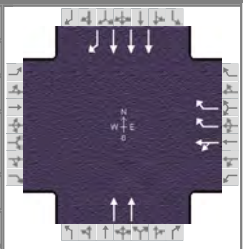
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 293 | 1818 | | 782 | | | 2203 | 198 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.356 | 1.428 | | 0.484 | | | 0.953 | 0.306 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 167.5 | 1805.5 | | 236.6 | | | 563.5 | 120.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.7 | 72.2 | | 9.5 | | | 22.5 | 4.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 197.3 | | 1.0 | | | 10.5 | 1.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.6 | 222.2 | | 18.6 | | | 34.5 | 17.2 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.7 | | F | 18.6 | | B | 33.1 | | C |
| Intersection Delay, s/veh / LOS | 95.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.97 | D | 1.13 | A | 1.81 | B |

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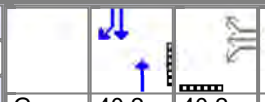
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

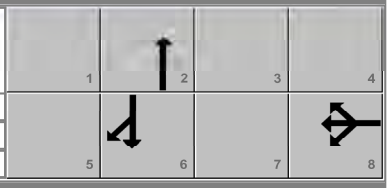


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 114 | 1800 | | 783 | | | 2181 | 209 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

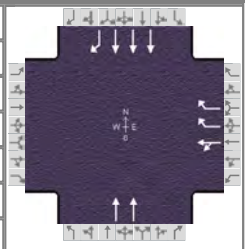
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 298 | 1818 | | 791 | | | 2203 | 211 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 9.6 | 40.2 | | 13.9 | | | 36.9 | 8.5 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 9.6 | 40.2 | | 13.9 | | | 36.9 | 8.5 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.362 | 1.428 | | 0.489 | | | 0.953 | 0.326 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 171.1 | 1805.5 | | 239.6 | | | 563.5 | 130.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.8 | 72.2 | | 9.6 | | | 22.5 | 5.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.1 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 197.3 | | 1.1 | | | 10.5 | 1.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.7 | 222.2 | | 18.7 | | | 34.5 | 17.5 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.3 | | F | 18.7 | | B | 33.0 | | C |
| Intersection Delay, s/veh / LOS | 94.6 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.98 | D | 1.14 | A | 1.82 | B |

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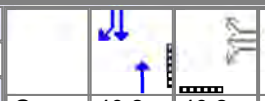
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2025 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

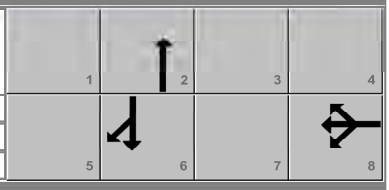


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 192 | 115 | 1877 | | 828 | | | 2314 | 257 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

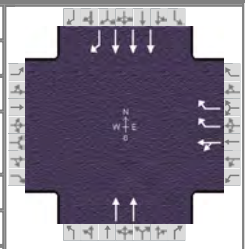
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 310 | 1896 | | 836 | | | 2337 | 260 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1842 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 10.1 | 40.2 | | 15.0 | | | 40.2 | 10.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 10.1 | 40.2 | | 15.0 | | | 40.2 | 10.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.377 | 1.489 | | 0.518 | | | 1.011 | 0.401 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 179.3 | 2007.8 | | 254.1 | | | 675.9 | 167.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.2 | 80.3 | | 10.2 | | | 27.0 | 6.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.6 | 24.9 | | 17.9 | | | 24.9 | 16.8 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 224.4 | | 1.2 | | | 21.5 | 1.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.9 | 249.3 | | 19.1 | | | 46.4 | 18.6 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 216.7 | | F | 19.1 | | B | 43.6 | | D |
| Intersection Delay, s/veh / LOS | 107.7 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.13 | D | 1.18 | A | 1.92 | B |

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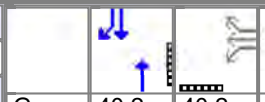
# HCS7 Signalized Intersection Results Summary

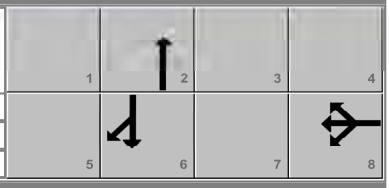
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2025 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 192 | 120 | 1877 | | 837 | | | 2314 | 270 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

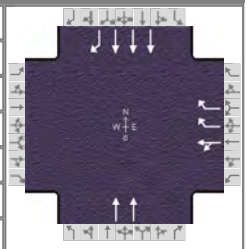
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 315 | 1896 | | 845 | | | 2337 | 273 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 10.3 | 40.2 | | 15.2 | | | 40.2 | 11.5 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 10.3 | 40.2 | | 15.2 | | | 40.2 | 11.5 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.383 | 1.489 | | 0.523 | | | 1.011 | 0.421 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 183 | 2007.8 | | 257.2 | | | 675.9 | 178.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.3 | 80.3 | | 10.3 | | | 27.0 | 7.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.6 | 24.9 | | 18.0 | | | 24.9 | 17.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 224.4 | | 1.2 | | | 21.5 | 2.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.9 | 249.3 | | 19.2 | | | 46.4 | 19.0 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 216.2 | | F | 19.2 | | B | 43.5 | | D |
| Intersection Delay, s/veh / LOS | 107.3 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.14 | D | 1.19 | A | 1.92 | B |

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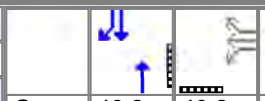
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

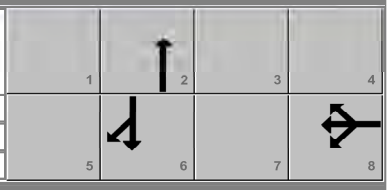


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 350 | 1768 | | 659 | | | 1953 | 198 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

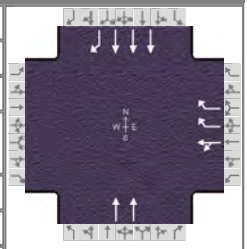
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 570 | 1786 | | 666 | | | 1973 | 200 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.684 | 1.403 | | 0.412 | | | 0.853 | 0.309 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 353.2 | 1722.2 | | 201.4 | | | 452.1 | 122 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.1 | 68.9 | | 8.1 | | | 18.1 | 4.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 19.8 | 24.9 | | 16.9 | | | 22.3 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 2.3 | 186.1 | | 0.8 | | | 4.3 | 1.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.2 | 211.0 | | 17.7 | | | 26.5 | 17.2 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 165.3 | | F | 17.7 | | B | 25.7 | | C |
| Intersection Delay, s/veh / LOS | 88.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.37 | D | 1.04 | A | 1.68 | B |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 358 | 1768 | | 675 | | | 1953 | 219 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 2 | 3 | 4 | | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

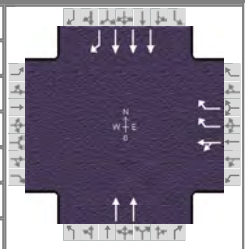
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 578 | 1786 | | 682 | | | 1973 | 221 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 22.4 | 40.2 | | 11.6 | | | 30.7 | 9.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 22.4 | 40.2 | | 11.6 | | | 30.7 | 9.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.694 | 1.403 | | 0.422 | | | 0.853 | 0.342 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 360.3 | 1722.2 | | 206 | | | 452.1 | 137.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.4 | 68.9 | | 8.2 | | | 18.1 | 5.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.0 | 24.9 | | 17.0 | | | 22.3 | 16.3 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 2.5 | 186.1 | | 0.8 | | | 4.3 | 1.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.5 | 211.0 | | 17.8 | | | 26.5 | 17.7 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 164.9 | | F | 17.8 | | B | 25.6 | | C |
| Intersection Delay, s/veh / LOS | 87.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.39 | D | 1.05 | A | 1.69 | B |

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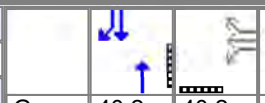
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2025 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

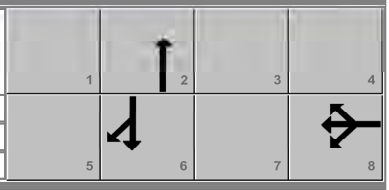


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 227 | 368 | 1922 | | 742 | | | 2075 | 177 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

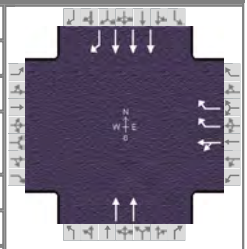
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 601 | 1941 | | 749 | | | 2096 | 179 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1864 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 23.7 | 40.2 | | 13.0 | | | 33.9 | 7.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 23.7 | 40.2 | | 13.0 | | | 33.9 | 7.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.722 | 1.525 | | 0.464 | | | 0.907 | 0.276 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 381.1 | 2126.9 | | 226.7 | | | 503.9 | 107.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 15.2 | 85.1 | | 9.1 | | | 20.2 | 4.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.3 | 24.9 | | 17.4 | | | 23.2 | 15.7 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 3.1 | 240.3 | | 1.0 | | | 6.5 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 23.4 | 265.2 | | 18.3 | | | 29.7 | 16.8 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 208.1 | | F | 18.3 | | B | 28.7 | | C |
| Intersection Delay, s/veh / LOS | 109.2 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.68 | E | 1.11 | A | 1.74 | B |

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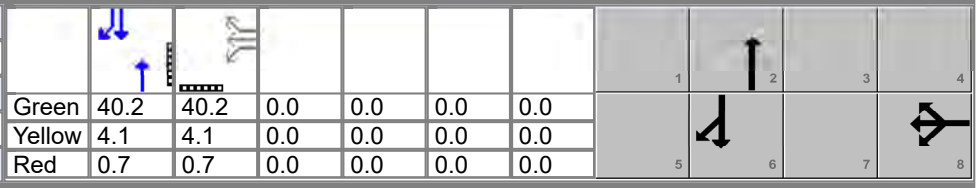
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2025 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 227 | 376 | 1922 | | 758 | | | 2075 | 198 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 609 | 1941 | | 766 | | | 2096 | 200 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 24.2 | 40.2 | | 13.4 | | | 33.9 | 8.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 24.2 | 40.2 | | 13.4 | | | 33.9 | 8.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.731 | 1.525 | | 0.474 | | | 0.907 | 0.309 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 388.3 | 2126.9 | | 231.5 | | | 503.9 | 122 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 15.5 | 85.1 | | 9.3 | | | 20.2 | 4.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.5 | 24.9 | | 17.5 | | | 23.2 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 3.3 | 240.3 | | 1.0 | | | 6.5 | 1.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 23.8 | 265.2 | | 18.5 | | | 29.7 | 17.2 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 207.6 | | F | 18.5 | | B | 28.6 | | C |
| Intersection Delay, s/veh / LOS | 108.6 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.70 | E | 1.12 | A | 1.75 | B |

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# K-2 2020 LADOT Correspondence Approving the Transportation Assessment

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




o:\0485\dwg\f2-2.dwg 10/28/2020 16:36:46 jshender llg exhibits color.ctb

NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

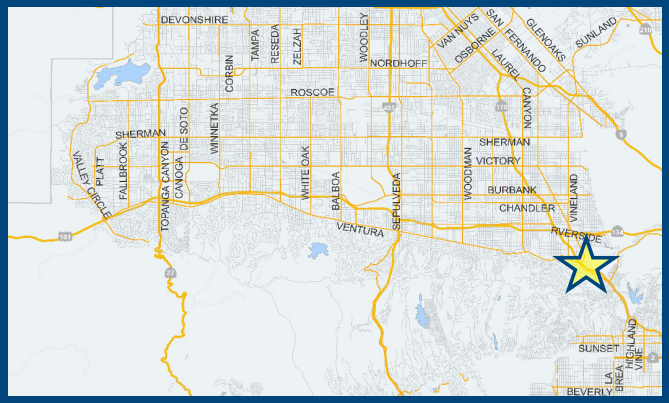
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

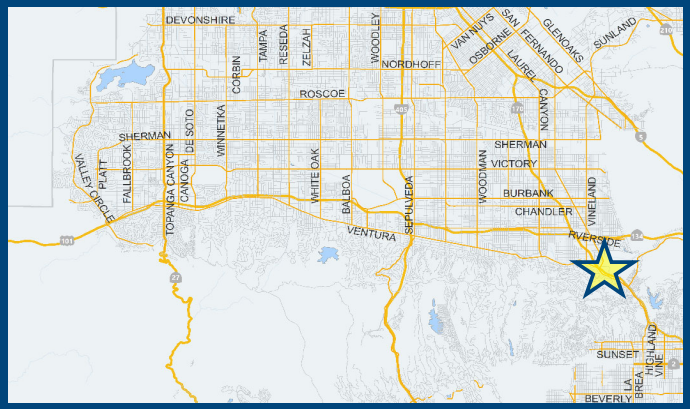
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
- 100 — city code parking provision for the project site
- 74 — actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

**Unbundle Parking**
- 175 — monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

**Parking Cash-Out**
- 50 — percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

**Price Workplace Parking**
- 6.00 — daily parking charge (dollar)
- 50 — percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

**Residential Area Parking Permits**
- 200 — cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

## Analysis Results

Total Employees: 256
Total Population: 0

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

## Significant VMT Impact?

### APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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

# K-3 2022 Transportation Analysis Addendum

# MEMORANDUM

| | | | |
|---|---|---|---|
| To: | Eileen Hunt<br>Los Angeles Department of Transportation | Date: | October 14, 2022 |
| From: | David S. Shender, P.E.<br>Jason A. Shender, AICP<br>Linscott, Law & Greenspan, Engineers | LLG Ref: | 1-22-0593-1 |
| Subject: | **Transportation Analysis Addendum for the Hilton Universal City Project** | | |

LINSCOTT LAW & GREENSPAN engineers

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This transportation analysis addendum has been prepared by Linscott, Law & Greenspan, Engineers (LLG) to provide an addendum to the Transportation Assessment for the proposed Hilton Universal City Project ("the Project") located at 555 Universal Hollywood Drive in the Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass Community Plan Area of the City of Los Angeles, California (the "Project Site").

LLG previously prepared a Transportation Assessment dated December 2020 (the "2020 Approved Transportation Assessment") for a previous design of the Project (the "2020 Project") based on the *Los Angeles Department of Transportation (LADOT) Transportation Assessment Study Guidelines*, July 2020[1] (the "2020 TAG"). The findings of the 2020 Approved Transportation Assessment were confirmed in the LADOT assessment letter[2] dated December 18, 2020. The LADOT assessment letter is contained in ***Appendix A***.

Subsequent to the preparation of the 2020 Approved Transportation Assessment, minor changes to the Project have been proposed. Additionally, LADOT has published an updated version of the *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* July 2022[3] (the "2022 TAG").

This transportation analysis addendum has been prepared to address the following items:

- Minor Change in Project Description. The 2020 Project evaluated in the 2020 Approved Transportation Assessment included 395 hotel guestrooms (and ancillary meeting room/ballroom space), 12,000 square feet of quality restaurant floor area and 10,000 square feet of spa floor area limited to guests and 250 non-guest members. Additionally, the 2020 Project proposed 10,000 square feet of ancillary meeting room space and 5,000 square feet of ballroom space.

[1] *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* LADOT, July 2020.
[2] *Transportation Assessment for the Proposed Hilton Universal City Hotel Expansion Project Located at 555 East Universal Hollywood Drive (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR),* LADOT, December 18, 2020.
[3] *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* LADOT, August 2022.

LLG understands that while the size of the restaurant components of the Project have not changed, the Project now proposes quality restaurant, as well as high-turnover restaurant uses. Additionally, the proposed size of the spa component has decreased slightly to 9,570 square feet (i.e., a decrease of 430 square feet). Furthermore, the ancillary ballroom addition is no longer proposed, while the ancillary meeting room space to be added has decreased from 10,000 square feet to 3,425 square feet. This transportation analysis addendum evaluates the changes in the trip generation forecast for the Project based on the changes to the Project Description. A comparison of the 2020 Project evaluated in the 2020 Approved Transportation Assessment and the Project as currently proposed is provided in ***Table 1*** below.

**Table 1**
**Comparison of Land Uses**
**2020 Project vs. Project**

| Land Use | 2020 Project | Project |
|---|---|---|
| Hotel Guestrooms | 395 Guestrooms | 395 Guestrooms |
| Quality Restaurant | 12,000 s.f. | 5,950 s.f. |
| High-Turnover Restaurant | -- | 6,050 s.f. |
| Spa | 10,000 s.f. | 9,570 s.f. |
| Ancillary Ballroom | 5,000 s.f. | -- |
| Ancillary Meeting Room | 10,000 s.f. | 3,425 s.f. |

- Updated List of Related Projects. The list of related projects provided in the 2020 Approved Transportation Assessment has been updated to reflect information current as of August 2022. The updated list of related projects is presented in ***Table 4***. A total of six projects have been added to the list of related projects. Additionally, the development status and descriptions of the related projects included in the 2020 Approved Transportation Assessment has been updated to reflect current information.

- Updated CEQA Vehicle Miles Traveled (VMT) Analysis (Threshold T-2.1). The VMT analysis for the Project has been updated based on the revised Project description, as well as based on revised VMT analysis criteria for hotel projects per the 2022 TAG.

- Updated CEQA Geometric Design Analysis (Threshold T-3). The 2022 TAG requires the analysis of freeway off-ramp queueing be included as part of the Threshold T-3 analysis. The Threshold T-3 analysis has been updated based on the Project, as well as the 2022 TAG requirements.

- Updated Non-CEQA Project Access and Circulation Review. In conjunction with the trip generation forecast for the Project, the updated list of related projects, and revised guidance provided in the 2022 TAG, the non-CEQA Project Access and Circulation Review has been updated for "Existing with Project", "Future Cumulative Baseline", and "Future Cumulative with Project" conditions.

  It is noted that as with the 2020 Approved Transportation Assessment, the Existing conditions for this transportation analysis addendum are based on the year 2020. The Notice of Preparation (NOP)[4] for the Project is dated October 6, 2020. The NOP establishes the existing baseline year for preparation of the Draft Environmental Impact Report (DEIR). Furthermore, the approved Transportation Assessment Memorandum of Understanding (MOU) provided in Appendix A of the 2020 Approved Transportation Assessment was approved by LADOT staff on October 14, 2020 and is still valid.

It is noted that the other analyses (i.e., CEQA Threshold T-1, Non-CEQA Pedestrian, Bicycle, and Transit Access, and Non-CEQA Construction analyses) provided within the 2020 Transportation Assessment are applicable for the Project and therefore do not require revision in conjunction with this addendum.

## Project Description

*Project Site Location*

The Project Site is located at 555 Universal Hollywood Drive in the Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass Community Plan Area of the City of Los Angeles (the "City"). The Project Site is generally bounded by undeveloped parcels and Universal Hollywood Drive to the north, landscaped hillside, a surface parking lot, and W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west. The Project Site location and general vicinity are shown in ***Figure 1***.

[4] *Notice of Preparation of Environmental Impact Report and Public Scoping Meeting for the Hilton Universal City Project (ENV-2017-5424-EIR),* Los Angeles Department of City Planning, October 6, 2020.

The Project Site is located within a Transit Priority Area and is currently served by many local lines and regional/commuter lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. The transit lines include: Metro Local Lines 150/240, 155, 224, and 237, Metro Rapid Line 750, the Metro B Line (Red), and the BurbankBus Pink Route. Universal Studios Hollywood also provides a complimentary shuttle service from the existing Hilton Los Angeles/Universal City Hotel (the "Existing Hotel Building") to Universal Studios Hollywood and Universal CityWalk and a complimentary tram from the Metro B Line (Red Line) Universal City/Studio City Station to the theme park entrances. In addition, a pedestrian bridge over Lankershim Boulevard provides safe and convenient pedestrian access surrounding the Metro B Line (Red Line) Universal City/Studio City Station and the Universal Studios Tram Stop. This remains unchanged from the 2020 Project evaluated in the 2020 Approved Transportation Assessment.

*Existing Project Site*

The Project Site comprises approximately 7.26 acres and is currently developed with the Existing Hotel Building and associated improvements, including ancillary hotel uses (the "Ancillary Hotel Building"). The Existing Hotel Building is a 24-story building with 495 hotel guestrooms, 26,030 square feet of meeting/banquet space, 5,050 square feet of restaurant/lounge area, 8,819 square feet of outdoor pool area, 924 square feet of retail/sundry floor area, and 9,665 square feet of lobby/circulation area. There are currently 652 parking spaces serving the Existing Hotel Building. Access to the Project Site is provided via one driveway along the west side of Universal Hollywood Drive, at the northeasterly portion of the Project Site. This remains unchanged from the 2020 Project.

*Project Description*

As proposed, the Project would improve and expand the Existing Hotel Building with the addition of an 18-story expansion building (the "Hotel Expansion Building") on the southern portion of the Project Site. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 square feet of restaurant floor area, and 9,570 square feet of spa floor area limited to guests and 250 non-guest members. The proposed restaurants include a 4,850 square-foot restaurant on Level B1 (the "Level B1 Restaurant"), 1,200 square feet of pool food service/bar area (the "Poolside Restaurant"), and a 5,950 square-foot restaurant and bar on the rooftop (the "Rooftop Restaurant"). Additionally, the Project would expand the northern portion of the Ancillary Hotel Building to include an additional 3,425 square feet of ancillary meeting space which would consist of four separate meeting rooms of less than 750 square feet each and a connecting hallway (the "Meeting Room Addition"). An additional 464 parking spaces would be added to the Project Site as part of the

Project, for a total of 1,116 parking spaces on-site. Construction and occupancy of the Project is proposed to be completed by the year 2027. The conceptual site plan for the Project is illustrated in ***Figure 2***. A comparison of the land uses within the 2020 Project and the Project are summarized in *Table 1*, above.

*Vehicular Project Site Access*

Like the 2020 Project, vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the Project Site. This internal roadway provides vehicle access to the new courtyard adjacent to the Meeting Room Addition (the "North Plaza"), the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building (the "South Plaza"). The existing Universal Hollywood driveway will continue to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

*Pedestrian and Bicycle Project Site Access*

Like the 2020 Project, pedestrian access to the Project Site will continue to be provided via Universal Hollywood Drive. The north side of the existing driveway is improved with sidewalks, and the outbound driveway approach at Universal Hollywood Drive is improved with a striped crosswalk and American with Disabilities Act (ADA) access ramps with yellow truncated domes. Primary pedestrian access to the building on the Project Site will continue to be provided from the South Plaza, which will continue to serve as the pick-up/drop-off area for the complementary Universal Studios Hotel Shuttle. Pedestrian access will also continue to be provided from the parking garage with elevator access. Walkways will be provided around the building perimeters to provide safe pedestrian access through the Project Site to the building entrances. Additionally, as shown in *Figure 2*, a pedestrian path along the south side from the Project Site to the sidewalk along the Project Site's Universal Hollywood Drive frontage has been identified as a potential improvement.

Bicycle access to the Project Site will continue to be provided via Universal Hollywood Drive. The Project will provide 62 bicycle parking spaces on Level B3 of the parking garage for hotel guests, visitors, and employees of the Project. Bicycle parking spaces will be installed in compliance with the Los Angeles Municipal Code (LAMC). The 2020 Project included 73 bicycle parking spaces, which accounted for parking required for the previously proposed Ballroom.

*Project Parking*

There are currently 652 parking spaces provided in the Existing Hotel Building's on-site subterranean parking garage. To meet the LAMC vehicle parking requirements, the Project will expand the existing three-level, below-grade parking garage to the north, provide overflow surface parking for employees and service vehicles along the existing service road that runs generally along the eastern perimeter of the Project Site, and add new parking spaces along the Project Site's internal roadway. The Project will provide a total of 464 new parking spaces. Upon completion of the Project, a total of 1,116 parking spaces will be provided for the Existing Hotel Building and the Project. The 2020 Project included 408 new parking spaces, which is 56 fewer spaces than the Project.

*Project Service Area*

Like the 2020 Project, all loading activities will continue to occur off-street and internal to the Project Site. Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Ancillary Hotel Building, similar to existing conditions. The loading dock will continue to be accessed by the service road along the east side of the Project Site.

*Hotel Valet/Passenger Drop-Off/Pick-Up*

Like the 2020 Project, the existing banquet entrance at the west façade of the Ancillary Hotel Building will become a rideshare (e.g., Uber/Lyft, airport shuttles, etc.) pick-up/drop-off location as shown on *Figure 2*. Hotel guests and visitors choosing to utilize the Hotel's valet service will be directed to drop-off their vehicles at the valet area on Level 1. The location of the Hotel's valet drop-off/pick-up area is shown in ***Figure 3***. Guests to the Hotel's existing conference center or Meeting Room will utilize a new valet station at Level 2 (or P1) of the existing parking garage via the existing vehicular ramp.

*Project Transportation Demand Management Strategies*

The 2020 Project included four transportation demand management (TDM) strategies to be implemented as Project Design Features. No changes to the TDM strategies described in the 2020 Approved Transportation Assessment are proposed as part of the Project. The following subsection provides a description of the TDM strategies to be implemented as Project Design Features.

The Project includes four transportation demand management (TDM) strategies to be implemented as Project Design Features. The TDM strategies are listed in Table 2.2-2 of the 2022 TAG. The Existing Hotel Building currently implements these TDM

strategies and will continue to do so upon completion of the Project. Further discussion of the individual TDM strategies is provided in the sections below.

- Transit Subsidies. This TDM strategy involves the subsidization of transit fare for employees of the Project. The subsidy will be proactively offered to each employee at least once annually for a minimum of five years. At the time of initial opening, the Project will offer a daily transit subsidy to all employees of $1.49 per day.

- Promotions and Marketing. The Project will utilize promotional and marketing tools to educate and inform employees about alternative transportation options and the effects of their travel choices. Rather than two-way communication tools or tools that would encourage an individual to consider a different mode of travel at the time the trip is taken (i.e., smartphone application, daily email, etc.), this TDM strategy includes passive educational and promotional materials, such as posters, information boards, or a website with information that employees can choose to read at their own leisure.

- Include Bicycle Parking per Los Angeles Municipal Code. Table 12.21.A.16(a)(2) in the LAMC provides the required short-term and long-term bicycle parking spaces for the Project. The Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces on-site.

  The short-term bicycle parking ratios are as follows:

  - Hotel (395 guestrooms): 1 space per 20 guestrooms. (20 spaces);
  - Restaurant (12,000 s.f.): 1 space per 2,000 s.f.. (6 spaces); and
  - Spa (9,570 s.f.): 1 space per 2,000 s.f.. (5 spaces).

  The long-term bicycle parking ratios are as follows:

  - Hotel (395 guestrooms): 1 space per 20 guestrooms. (20 spaces);
  - Restaurant (12,000 s.f.): 1 space per 2,000 s.f.. (6 spaces); and
  - Spa (9,570 s.f.): 1 space per 2,000 s.f.. (5 spaces).

  Based on the above, the Project is required to provide 31 short-term and 31 long-term bicycle parking spaces, for a total of 62 bicycle parking spaces.

The Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces as a Project Design Feature. The bicycle parking requirements for the Project will be confirmed with the appropriate City departments.

- Include Secure Bicycle Parking and Showers. This strategy involves implementation of additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel by providing amenities at destinations. This strategy applies to projects that include bicycle parking on-site per the LAMC. Projects providing long-term bicycle parking secured from the general public in accordance with LAMC Section 12.21A.16(d)(2) and showers in accordance with LAMC Section 91.6307 qualify for this measure.

  As noted above, the long-term bicycle parking secured from the general public in accordance with LAMC Section 12.21A.16(d)(2). In addition, the Project will provide showers in accordance with LAMC Section 91.6307.

**Updated Project Trip Generation**

The 2020 Approved Transportation Assessment evaluated a Project including up to 395 hotel guestrooms, 12,000 square feet of quality restaurant floor area, and 10,000 square feet of spa floor area limited to guests and 250 non-guest members. The weekday AM and PM peak hour trip generation forecast for the Project's prior development program is presented in Table 2–1 of the 2020 Approved Transportation Assessment, which was prepared utilizing rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual,* 10th Edition.[5] The daily vehicle trips expected to be generated by the Project were estimated using Version 1.3 of the City's VMT Calculator. Copies of the detailed VMT Calculator worksheets for the Project's prior development program are contained in Appendix B of the 2020 Approved Transportation Assessment.

The trip generation forecast has been revised based on the updated Project. Additionally, subsequent to the preparation of the 2020 Approved Transportation Assessment, ITE released an updated version of their *Trip Generation Manual* publication. The updated trip generation forecast has been prepared utilizing rates provided in the ITE *Trip Generation Manual,* 11th Edition.[6] The following trip generation rates were used to forecast the traffic volumes expected to be generated by the Project:

[5] Institute of Transportation Engineers, *Trip Generation Manual,* 10th Edition, Washington, D.C., 2017.
[6] Institute of Transportation Engineers, *Trip Generation Manual,* 11th Edition, Washington, D.C., 2021.

- Hotel: ITE Land Use Code 310 (Hotel) trip generation average rates were used to forecast the traffic volumes expected to be generated by the hotel component of the Project (including the Project's Meeting Room Addition).

- Rooftop Restaurant: ITE Land Use Code 931 (Fine Dining Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Rooftop Restaurant component of the Project.

- Level B1 and Poolside Restaurants: ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Level B1 Restaurant and Poolside Restaurant components of the Project.

- Spa: ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates were used to forecast the traffic volumes expected to be generated by the spa component of the Project.

In addition to the trip generation forecasts for the Project (which are essentially an estimate of the number of vehicles that are expected to enter and exit the Project Site access points), a forecast was also made of the transit and walk-in trips that will be generated by the Project in lieu of trips by the private automobile. The Project Site is within a Transit Priority Area and is currently served by many local lines and regional/commuter lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. The transit lines include: Metro Local Lines 150/240, 155, 224, and 237, Metro Rapid Line 750, the Metro B Line (Red), and the BurbankBus Pink Route. Further discussion of the transit framework is provided in Section 3.2 herein. The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding land uses, specifically Universal Studios Hollywood and Universal CityWalk, located immediately east of the Project Site. Consistent with the 2022 TAG and approved by LADOT in the Transportation Assessment MOU provided in Appendix A of the 2020 Approved Transportation Assessment, a transit and walk-in adjustment of 25 percent (25%) has been utilized due to the Project's proximity to nearby transit lines and pedestrian attractors.

Lastly, an internal capture adjustment has been applied for the Project to account for synergistic effects of the planned land use mix. Internal capture trips are those trips made internal to the site between land uses in a mixed or multi-use development, land uses tend to interact, and thus attract a portion of each other's trip generation. An internal capture adjustment of 25% has been utilized to account for the interactions between the hotel and the spa, Level B1 Restaurant, and Poolside Restaurant uses. An internal capture adjustment of 15% has been utilized to account for the

interactions between the hotel and the Rooftop Restaurant use. A greater internal capture adjustment has been utilized to account for the interactions between the hotel for the spa, Level B1 Restaurant, and Poolside Restaurant uses as compared the interactions between the hotel and the Rooftop Restaurant use as the spa, Level B1 Restaurant, and Poolside Restaurant uses are expected to be utilized primarily by hotel guests, while the Rooftop Restaurant is expected to be utilized a greater percentage of non-hotel guests when compared to the other uses provided within the Project.

As presented in ***Table 2***, the Project is expected to generate 165 net new vehicle trips (94 inbound trips and 71 outbound trips) during the AM peak hour. During the PM peak hour, the Project is expected to generate 229 net new vehicle trips (129 inbound trips and 100 outbound trips). As presented in *Table 2*, when compared to the 2020 Project, the Project is expected to generate 17 additional vehicle trips during the AM peak hour and 17 fewer vehicle trips during the PM peak hour.

The daily vehicle trips expected to be generated by the Project were estimated using Version 1.3 of the City's VMT Calculator. Copies of the detailed VMT Calculator worksheets for the Project are contained in ***Appendix B.*** As indicated in the summary VMT Calculator worksheet (Page 2 of *Appendix B*), the Project is forecasted to generate 3,885 daily vehicle trips. It is noted that the Project will incorporate TDM strategies as Project Design Features as described herein. When compared to the Project evaluated in the 2020 Transportation Assessment, the Project is expected to generate 174 additional daily vehicle trips. The VMT Calculator worksheets for the Project evaluated in the 2020 Approved Transportation Assessment are provided in Appendix B therein.

***Table 3*** below compares the daily trip generation, as well as the net new weekday AM and PM peak hours trips for the 2020 Project and the Project.

**Table 3**
**Trip Generation Comparison**
**2020 Project vs. Project**

| Period | 2020 Project | Project | Net Difference |
|---|---|---|---|
| Daily | 3,711 | 3,885 | 174 |
| Weekday AM Peak Hour | 148 | 165 | 17 |
| Weekday PM Peak Hour | 246 | 229 | -17 |

The general, directional traffic distribution patterns for Project-related trips bound to the Project Site is presented in Figure 2–5 of the 2020 Approved Transportation Assessment. The forecasted net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the Project are presented in ***Figures 4*** and ***5***, respectively. The traffic volume assignments presented in *Figures 4* and *5* reflect the traffic distribution characteristics shown in Figure 2–5 of the 2020 Approved Transportation Assessment, and the Project traffic generation forecast presented in *Table 2*.

**Cumulative Development Projects**

*Related Projects*

The transportation analysis prepared in the 2020 Approved Transportation Assessment utilized related projects lists provided by LADOT and the City of Los Angeles Department of City Planning (LADCP). The related projects list has been updated to reflect known related projects within the Project vicinity as of August 2022. Per the 2022 TAG, related projects within a radius of one-quarter mile from the farthest outlying study intersection should be included. Therefore, related projects within a 1.15-mile radius (one-quarter mile past the farthest outlying study intersection, Barham Boulevard / W.C. Fields Drive – Cahuenga Boulevard East) of the Project Site were included. The updated list of related projects in the Project Site area is presented in ***Table 4***. The location of the related projects is shown in ***Figure 6***.

When compared to the list of related projects provided in the 2020 Approved Transportation, the following has changed:

- Six projects have been added to the list of related projects (Map Nos. 10-15).

- The 11036 W. Moorpark Street Apartments Project (Map No. 3) has been completed. However, as noted in Section 3.4 of the 2020 Approved Transportation Assessment, peak hour traffic volume data was collected at the study intersections in 2018, and this project had yet to be completed. The completed project has been included in the cumulative baseline to provide a complete forecast of on-street traffic conditions prior to occupancy of the Project.

- The proposed development program for the Studio City Crossings project (Map No. 9) located at 11265-11321 Ventura Boulevard was updated subsequent to the preparation of the 2020 Approved Transportation

Assessment. The floor areas and associated traffic volumes expected to be generated by this project have been updated based on current information.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the ITE *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 4*. The updated distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 7*** and ***8***, respectively.

*Ambient Traffic Growth*

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year up to and including the year 2027, which is the anticipated year of Project buildout. The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County*[7] ("CMP manual") and determined in consultation with LADOT staff. Based on review of the general traffic growth factors provided in the CMP manual for the Project Site area (Regional Statistical Area [RSA] 13, Burbank, which includes the Project Site), the existing traffic volumes are expected to increase at an annual rate of approximately 0.34% per year between the years 2015 and 2030. Thus, application of an annual growth factor of 1.0% annual growth results in a conservative, worst-case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Furthermore, the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity.

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

## CEQA ANALYSIS OF TRANSPORTATION IMPACTS

In compliance with the CEQA Guidelines, the 2022 TAG establishes three analyses required for evaluating transportation impacts for land use projects: Conflicting with Plans, Programs, Ordinances, or Policies (Threshold T-1); Causing Substantial Vehicle Miles Traveled (Threshold T-2.1); and Substantially Increasing Hazards Due

[7] *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority, 2010.

to a Geometric Design Feature or Incompatible Use (Threshold T-3). These analyses correspond with the transportation analyses required as part of the Project's Environmental Impact Report (EIR). The Threshold T-1 analysis prepared for the 2020 Project within the 2020 Approved Transportation Assessment is applicable and therefore does not require revision. The Threshold T-2.1 and Threshold T-3 analyses have been updated based on the Project.

**VMT Analysis (2022 TAG Threshold T-2.1)**

The VMT analysis provided in the 2020 Approved Transportation Assessment has been updated based on the revised development program, as well as the requirements of the 2022 TAG. Details of the updated VMT analysis are provided in the following section.

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA Guidelines in November 2017 and an accompanying technical advisory guidance[8] in April 2018 (*OPR Technical Advisory*) that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). Section 15064.3, subdivision (b)(1) states the following:

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

Comprehensive updates to the State CEQA Guidelines were certified and adopted by the California Natural Resources Agency in December 2018. Accordingly, the City adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G question:

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

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

For land use projects, the intent of this threshold is to assess whether a land use project causes substantial VMT impacts. The City has developed the following screening and impact criteria to address this question. The criteria below are based on the *OPR Technical Advisory* but reflects local considerations.

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

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

For purposes of screening the daily vehicle trips, a proposed project's daily vehicle trips should be estimated using the City's VMT Calculator tool or the most recent edition of the ITE *Trip Generation Manual*. TDM strategies should not be considered for the purposes of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits described in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the 2022 TAG), the daily vehicle trips generated by the existing or qualified terminated land uses can be estimated using the VMT Calculator tool and subtracted from the proposed project's daily vehicle trips to determine the net increase in daily vehicle trips.

    - As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix B*), the Project is forecast to generate a net increase of 4,421 daily vehicle trips. Therefore, the Project exceeds the screening criteria set forth in T-2.1-1.

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

For the purpose of screening the VMT, a project's daily VMT should be estimated using the City's VMT Calculator tool or the City's Travel Demand Forecasting (TDF) model. TDM strategies should not be considered for the purpose of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits description in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the 2022 TAG), the daily VMT generated by the existing or qualified terminated land uses can be estimated using the City VMT Calculator tool and subtracted from the project's daily VMT to determine the net increase in daily VMT.

    - As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix B*), the Project is forecast to generate 30,688 daily

VMT. Therefore, the Project exceeds the screening criteria set forth in T-2.1-2.

In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses[9] are assumed to have less than significant VMT impacts. If the answer to the following question is no, then that portion of the project meets the screening criteria and a no impact determination can be made for the portion of the project that contains retail uses. However, if the retail project is part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's VMT, as specified in Subsection 2.2.4 of the 2022 TAG.

- If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet?

    - The Project includes 21,570 square feet of local-serving retail uses, including 5,950 square feet of quality restaurant floor area, 6,050 square feet of high-turnover restaurant floor area, and 9,570 square feet of spa floor area. Based on the criteria above, these uses are assumed to be local serving. Therefore, a no impact determination can be made for the Project's restaurant and spa components.

*Impact Criteria and Methodology*

Per Section 2.2.3 of the 2022 TAG, a development project will have a potential VMT impact if the project meets the following:

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

- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

- For regional serving retail projects, the project would result in a net increase in VMT.

[9] As noted in the 2022 TAG, the definition of "retail" for this purpose includes restaurant uses.

- For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above.

Different VMT significance thresholds have been established for each APC boundary area as the characteristics of each are distinct in terms of land use, density, transit availability, employment, etc. The City's significance thresholds (i.e., provided on a daily household VMT per capita basis and a daily work VMT per employee basis) for each of the seven APC boundary areas are presented in ***Table 5***. As the Project Site is located within the South Valley Area Planning Commission (APC), the VMT impact criteria (i.e., 15% below the APC average) applicable to the Project is 11.6 Daily Work VMT per Employee.

Section 2.2.4 of the 2022 TAG provides screening criteria and thresholds of significance used to determine other types of land uses occasionally reviewed by LADOT (including hotel projects) would result in significant impacts as it relates to VMT:

- Hotel and Motel Uses. VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips, and apply a separate impact threshold to each trip type. The employee trips should be treated as similar to those for office uses where the hotel/motel project would result in an impact if it generates work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

  To evaluate the potential VMT impacts of visitor/guest trips, the analysis should screen out visitor/guest trips from a quantitative analysis where those hotels/motels would be considered to meet a localized demand for visitor/guest travel. Hotel and motel uses could be shown to not contribute to significant visitor/guest trips if they are proposed in locations that are closer to common or desired destinations for guests and visitors than other existing hotel and motel uses, and therefore result in shorter overall visitor trips that are expected without the project. The conclusion that hotel and motel uses would not result in a significant VMT impact from visitor/guest trips would be more substantiated where the hotel/motel project includes TDM measures that actively promote transit and bike share services to the hotel/motel patrons.

  Where it cannot be qualitatively demonstrated that hotel and motel uses would not result in lower guest/visitor trip distances as compared to without the project, the analysis should quantify the VMT of visitor/guest trips and either evaluate if the visitor/guest trips would lead to a net increase in daily VMT of those trips as compared to without the project or, if technically feasible, would

generate VMT per visitor/guest that exceed 15% below the existing average citywide VMT per visitor/guest.

The impact methodology set forth in the TAG for a hotel/mixed-use project such as the Project is as follows:

- Mixed-Use Projects. The project VMT impact should be considered significant if any one (or all) of the project land uses exceed the impact criteria for that particular land use, taking credit for internal capture. In such cases, mitigation options that reduce the VMT generated by any or all of the land uses could be considered.

- Hotel and Motel Uses. VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips, and apply a separate impact threshold to each trip type. The employee trips should be treated as similar to those for office uses where the hotel/motel project would result in an impact if it generates work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

  Where it cannot be qualitatively demonstrated that hotel and motel uses would not result in lower guest/visitor trip distances as compared to without the project, the analysis should quantify the VMT of visitor/guest trips and either evaluate if the visitor/guest trips would lead to a net increase in daily VMT of those trips as compared to without the project or, if technically feasible, would generate VMT per visitor/guest that exceed 15% below the existing average citywide VMT per visitor/guest.

*Summary of Project VMT Analysis*

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

- As described in the Project Transportation Demand Management section herein, the Project will commit to including four strategies to be implemented as Project Design Features. The TDM strategies include: Transit Subsidies; Promotions and Marketing; Include Bicycle Parking per the LAMC; and Include Secure Bicycle Parking and Showers. The Existing Hotel Building

currently implements these TDM strategies and will continue to do so upon completion of the Project.

- The Project, with the inclusion of the Project Design Features, is estimated to generate a total of 3,885 daily vehicle trips.

- The estimated Daily Work VMT per Employee for the Project is 8.7 Daily Work VMT per Employee, which is less than the South Valley APC Daily Work VMT per Employee significance threshold of 11.6 Daily Work VMT per Employee. As the estimated Daily Work VMT per Employee is less than the South Valley APC's significance threshold for Daily Work VMT per Employee, employee trips associated with the Project's hotel component would result in a "less than significant" VMT impact.

- Per the 2022 TAG, the Project's quality restaurant, high-turnover restaurant, and spa components, which total 21,570 square feet of floor area, are considered local-serving retail uses. As the Project's local-serving retail uses total less than 50,000 square feet, a no impact determination can be made as it relates to VMT for these uses.

- Per the 2022 TAG, hotel uses such as the Project could be shown to not contribute to significant visitor/guest trips if they are proposed in locations that are closer to common or desired destinations for guests and visitors than other existing hotel uses, and therefore result in shorter overall visitor trips that are expected without the Project. The Project proposes to add 395 guestrooms across Universal Hollywood Drive from Universal Studios Hollywood and Universal CityWalk. The Existing Hotel Building is the closest hotel to the main entrance of Universal Studios Hollywood and Universal CityWalk. The only other hotel use within a similar proximity to these destinations is the Sheraton Universal, which abuts the Project Site to the west.

  Given the Project's location relative to Universal Studios Hollywood and Universal CityWalk, it is assumed that many hotel visitors/guests will walk between these destinations and the Project Site. These walking trips will potentially replace current vehicle trips to these destinations by the visitors staying at off-site hotels. Additionally, the Existing Hotel Building provides a shuttle service which transports visitors and guests to and from Universal Studios Hollywood and Universal CityWalk, which will be available to future visitors and guests of the Project, thereby further reducing vehicle trips. Furthermore, the Project will provide bicycle parking facilities for visitors and guests per the requirements of the LAMC. As the Project will add 395

additional guestrooms within the direct vicinity of Universal Studios Hollywood and Universal CityWalk, will provide a shuttle transporting guests to and from these destinations, and will provide bicycle parking amenities, it is concluded that the Project will not contribute to significant visitor/guest trips, and therefore results in a "less than significant" VMT impact.

Per direction from LADCP, TDM strategies may only be considered as Project Design Features if the VMT impact without consideration of these strategies is less than significant. Accordingly, the daily vehicle trips and VMT expected to be generated by the Project without consideration of TDM strategies were also calculated using Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the proposed Project are contained in ***Appendix C***. As indicated in the summary VMT Calculator worksheet, the Project, without consideration of TDM strategies, is forecasted to generate the following:

- The Project would be estimated to generate a total of 4,421 daily vehicle trips.

- The estimated Daily Work VMT per Employee for the Project would be 9.9 Daily Work VMT per Employee, which is less than the South Valley APC significance threshold of 11.6 Daily Work VMT per Employee.

Based on the above, the Project would not have a significant VMT without consideration of the TDM strategies described herein. The Project Design Features would further reduce the Daily Work VMT per Employee expected to be generated by the Project. Thus, based on the above analyses, the Project would not result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT.

*Summary of Cumulative VMT Analysis*

As stated in the 2022 TAG, analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed Project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a

significant impact on transportation. However, as noted in the 2022 TAG, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) in the analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

Based on the above Project-related VMT analysis and the conclusions reported above (i.e., which conclude that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), the Project's contribution to a cumulative VMT impact would not be cumulatively considerable, and therefore, the Project's transportation impacts related to VMT would be less than significant.

**Geometric Design (Threshold T-3)**

The Geometric Design analysis provided in the 2020 Approved Transportation Assessment has been updated based on the updated screening criteria provided in the 2022 TAG. Details of the updated geometric design analysis are provided in the following section.

As stated in the 2022 TAG (refer to Section 2.4.1 thereof), impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. Evaluation of access impacts require details relative to project land use, size, design, location of access points, etc. These impacts are typically evaluated for permanent conditions after project completion but can also be evaluated for temporary conditions during project construction.

Project access can be analyzed in qualitative and/or quantitative terms, and in conjunction with the review of internal site circulation and access to parking areas. All proposed site access points should be evaluated.

Conversely, vehicle/vehicle conflicts may be created if the land use project would generate substantial demand that would result in additional vehicle queues on to a

freeway off-ramp that would further lead to unsafe differentials of travel speed between cars attempting to exit and cars traveling at higher speeds. The potential for freeway safety impacts can be analyzed quantitatively by simulation models and collecting information on existing prevailing travel speeds pursuant to the methodology described herein.

*Screening Criteria*

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

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?

    - No, the Project proposes to utilize the existing driveway currently serving the Project Site.

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

    As stated in the 2022 TAG (refer to Section 2.4.1 thereof), for the purpose of the screening for projects that are making physical changes to the public right-of-way, determine the street designation and improvement standard for any project frontage along streets classified as an Avenue or Boulevard (as designated in the City's General Plan) using the Mobility Plan 2035, or NavigateLA, an online portal managed by the City's Bureau of Engineering (BOE). If any street fronting the project site is an Avenue or Boulevard and it is determined that additional dedication, or physical modifications to the public right-of-way are proposed or required, the answer to this question is yes. For projects not subject to dedication and improvement requirements under the LAMC, though the project does propose dedications or physical modifications to the public right-of-way, which may also include new physical modifications along streets classified as either Collectors or Locals, the answer to this question is yes. Based on a review of the Project, the following answer is provided:

    - No, the Project is not proposing or required to make any modifications to the public right-of-way.

As the answer is "no" to both screening criteria questions, no further analysis is required to assess whether the Project would result in impacts due to geometric design hazards or incompatible uses. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, and the Project's impact would be less than significant.

In addition, the screening questions above, if the answer is "yes" to all the following questions, further analysis will be required to assess whether the project would result in impacts due to queueing from a freeway off-ramp that could lead to unsafe differential travel speeds:

- Does the land use project involve a discretionary action that would be under review by LADCP?
    - Yes, the Project involves a discretionary action that would be reviewed by LADCP.
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
    - Yes, the Project will generate a net increase 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix B*), the Project will generate 4,421[10] net new daily vehicle trips.
- Does the land use Project add 25 or more trips to any nearby freeway off-ramp serving the Project Site in either the morning or afternoon peak-hour?
    - Yes, as shown in *Figures 4* and *5*, the Project would add 26 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour. As shown in *Figures 4* and *5*, the Project would not add 25 or trips during the weekday AM and PM peak hours at other freeway off-ramps in the immediate vicinity of the Project Site.

Per the 2022 TAG, if Project traffic is expected to cause or add to a queue extending onto the freeway mainline by less than two car lengths, the Project would cause a less than significant safety impact. The analysis was prepared based on the *Highway*

[10] For screening purposes, the number of daily vehicle trips without reductions from implementation of TDM strategies are reported.

*Capacity Manual*[11] (HCM) operational analysis methodology pursuant to the 2022 TAG. The analysis was prepared utilizing the *HCS7* software package, which implements the HCM operational methods. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS7* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to the Updated Project Trip Generation Subsection Provided Herein

- Project Trip Distribution and Assignment: Refer to the Updated Project Trip Generation Subsection Provided Herein, as well as Subsection 2.9.2 of the 2020 Approved Transportation Assessment

- Existing Vehicle Network: Refer to Subsection 3.3 of the 2020 Approved Transportation Assessment

- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4 of the 2020 Approved Transportation Assessment

- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to the Related Projects and Ambient Traffic Growth Discussions Provided Herein

The operational analysis of vehicle queuing at the off-ramp was prepared for the following conditions:

(a) Existing (2020) conditions.[12]

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2027 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(d) Condition (c) with completion and occupancy of the Project.

[11] *Highway Capacity Manual 6th Edition,* Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.
[12] Existing conditions based on year 2020 per NOP and approved Transportation Assessment MOU, both of which are dated 2020.

Pursuant to the 2022 TAG, the HCM methodology for signalized unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the 95th percentile queues (in feet) for all approaches for the off-ramp intersection. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.

The assessment of the off-ramps includes a review of the vehicle queue length as compared to the total available queueing capacity of the ramp to determine whether the vehicle queue would extend beyond the length of the ramp onto the mainline. To this end, the queueing analysis looks at two separate components of the ramp capacity: the length of each approach lane to the intersection, and the remaining length of the ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline. The queue may exceed the striped length of a given approach lane, as long as there is sufficient additional queueing capacity on the ramp, it will not spill over onto the mainline.

The summary of the operational analysis of the off-ramp intersection is provided in ***Table 6***. The HCM methodology worksheets for the analyzed off-ramp are contained in ***Appendix D***.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3–6 and 3–7 of the 2020 Approved Transportation Assessment, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9*** and ***10***, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 11*** and ***12***, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 13*** and ***14***, respectively.

As shown in *Table 6*, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project conditions increases by 24.4 feet (i.e., just less than one vehicle length) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. Furthermore, the vehicle queue will not extend onto the mainline. Therefore, the Project would cause a less than significant freeway safety impact.

## NON-CEQA TRANSPORTATION ANALYSIS

As stated in the 2022 TAG, the authority for requiring non-CEQA transportation analysis and potentially requiring improvements to address identified deficiencies lies in the City's Site Plan Review authority as established in LAMC Section 16.05. As provided in Section 16.05:

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

Additional authority for preparing a non-CEQA transportation analysis is found in other City ordinances, such as certain transportation specific plans. The impacts, also referred to as deficiencies, discussed in the 2022 TAG are not intended to be interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified.

### Non-CEQA Project Access and Circulation Evaluation

The non-CEQA Project access and circulation analysis provided in the 2020 Approved Transportation Assessment has been updated based on the updated Project description and corresponding trip generation forecast, updated list of related projects, and the updated Project buildout year. Additionally, the analysis has been updated based on the requirements of the 2022 TAG. Details of the updated Project access and circulation analysis are provided in the following section.

Project access and circulation constraints relate to the provision of access to and from the Project Site, and may include safety, operational, or capacity constraints. Constraints can be related to vehicular/vehicular, vehicular/bicycle, or vehicular/pedestrian constraints as well as to operational delays. These conflicts may be created by the driveway configuration or through the placement of Project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to an intersection or crosswalk. The Project access and circulation has been evaluated for permanent conditions after Project completion.

***Table 7*** summarizes the vehicle queuing analysis prepared for each of the study locations for the representative intersection traffic movements for the weekday AM and PM peak hours. *Appendix D* contains the analysis data worksheets for the study intersections.

*Screening Criteria*

- Does the land use project involve a discretionary action that would be under review by LADCP?
    - Yes, the Project involves a discretionary action that would be reviewed by LADCP.
- Would the land use project generate a net increase of 500 or more daily vehicle trips?
    - Yes, the Project will generate a net increase 500 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix B*), the Project will generate 4,421 net new daily vehicle trips.

As the answer is "yes" to both of the screening criteria questions (i.e., the Project will require a discretionary action and the Project will generate more than 500 daily trips), further analysis is required to evaluate Project access, safety and circulation.

*Evaluation Criteria*

For operational evaluation of land use projects, the 2022 TAG requires a quantitative evaluation of the Project's expected access and circulation operations. Project access is considered constrained if the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard (as designated in the Mobility Plan 2035) at Project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections. Unacceptable or extended queuing may be defined as follows:

- Additional queue along through lanes and either of the following conditions are expected:
    - The projected peak hour intersection Level of Service (LOS) is D and the through lane queue increases by greater than 75 feet on any approach with the directional approach LOS at E or F, or

  - The projected peak hour intersection LOS is E or F and the through lane queue increases by greater than 50 feet on any approach with the directional approach LOS at E or F.

- Spill over from turn pockets into through lanes.

- Block cross streets or alleys.

- Contribute to gridlock congestion. For the purposes of this section, "gridlock" is defined as the condition where traffic queues between closely spaced intersections and impedes the flow of traffic through upstream intersections.

The 2022 TAG acknowledges that demand for curbside space has substantially increased due to the continued expansion of driver-for-hire transportation network companies (TNCs) and shared mobility services. As such, the 2022 TAG states that a Transportation Assessment should characterize the on-site loading demand of the project frontage and answer the following questions:

- Would the project result in passenger loading demand that could not be accommodated within any proposed on-site passenger loading facility?

  - No, as discussed herein, passenger loading associated with the Existing Hotel's and Project's valet service will occur in the valet area on Level 1. Guests to the Existing Hotel's existing conference center or Meeting Rooms will utilize a new valet station at Level 2 (or P1) of the existing parking garage via the existing vehicular ramp. The existing banquet entrance at the west façade of the Ancillary Hotel Building will become a rideshare (i.e., Uber/Lyft, airport shuttle) pick-up/drop-off location. While passenger loading and unloading will occur internal to the Project Site, some intermittent curbside loading/unloading may occur along the Project Site's frontage along Universal Hollywood Drive.

- Would accommodating the passenger loading demand create pedestrian or bicycle conflicts? Which curbside management options should be explored to better address passenger loading needs in the public right-of-way?

  - No, pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. For any curbside loading/unloading zones that may be proposed by the Project Applicant, appropriate signage and pavement/curb markings will be required by the City and installed by the Applicant. Any installations that fall within the City's

(public) right-of-way will require prior review and approval by LADOT.

*Operational and Passenger Loading Evaluation Methodology*

Based on coordination with LADOT staff and as presented in the Transportation Assessment MOU provided in Appendix A of the 2020 Approved Transportation Assessment, the following 11 study intersections were identified for operational evaluation of whether the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard:

1. US-101 Freeway Northbound Ramps / Campo de Cahuenga Way
2. MTA Driveway / Campo de Cahuenga Way
3. Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive
4. Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp
5. Lankershim Boulevard / Ventura Boulevard – Cahuenga Boulevard
6. US-101 Freeway Southbound Ramps – Regal Place / Cahuenga Boulevard
7. Universal Hollywood Drive / Hilton Driveway
8. Universal Studios Boulevard / W.C. Fields Drive
9. Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp
10. Universal Studios Boulevard / Cahuenga Boulevard West
11. Barham Boulevard / W. C. Fields Drive – Cahuenga Boulevard West

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

Per the 2022 TAG, if Project traffic is expected to cause or add to a queue extending onto the freeway mainline by less than two car lengths, the Project would cause a less than significant safety impact. The analysis was prepared based on the HCM operational analysis methodology pursuant to the 2022 TAG. The analysis was prepared utilizing the *HCS7* software package, which implements the HCM operational methods. In addition, specifics such as traffic volume data, lane

configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS7* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to the Updated Project Trip Generation Subsection Provided Herein

- Project Trip Distribution and Assignment: Refer to the Updated Project Trip Generation Subsection Provided Herein, as well as Subsection 2.9.2 of the 2020 Approved Transportation Assessment

- Existing Vehicle Network: Refer to Subsection 3.3 of the 2020 Approved Transportation Assessment

- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4 of the 2020 Approved Transportation Assessment

- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to the Related Projects and Ambient Traffic Growth Discussions Provided Herein

The operational analysis of vehicle queuing at the off-ramp was prepared for the following conditions:

(a) Existing (2020) conditions.

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2027 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(d) Condition (c) with completion and occupancy of the Project.

Pursuant to the 2022 TAG, the HCM methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the control delay (in seconds), LOS, and 95$^{th}$ percentile queues (in feet) for all approaches for the signalized intersections and the minor street approaches for the unsignalized intersections. The 95$^{th}$ percentile queue is the maximum back of queue with 95$^{th}$ percentile traffic volumes. The HCM 6$^{th}$ Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet,

which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet. The summary of the operational analysis of the study intersections is provided in *Table 7*. The HCM methodology worksheets for the analyzed intersections are contained in *Appendix D.*

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3–6 and 3–7 of the 2020 Approved Transportation Assessment, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 9* and *10*, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in *Figures 11* and *12*, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 13* and *14*, respectively.

As presented in *Table 7*, the Project would not cause or substantially extend vehicle queuing at eight of the 11 study intersections during the weekday AM and PM peak hours. At these intersections, the change in queue length associated with the Project ranges from no increase in queue length to a maximum of 50.4 feet (i.e., approximately two vehicles). Additionally, the change in through lane queue length associated with the Project ranges from no increase to a maximum of 34.5 feet (i.e., less than two vehicles). The Project would result in unacceptable queuing and/or operational deficiencies at the following intersections:

- <u>Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive (Study Int. No. 3)</u>

    - The change in queue length associated with the Project at the westbound Universal Hollywood Drive right-turn approach under Future Cumulative with Project conditions increases by 131.7 feet (i.e., more than five vehicles) during the weekday PM peak hour. It is noted that Universal Hollywood Drive is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Additionally, as this intersection is completely built out, no physical modifications or improvements to the public right-of-way are feasible.

- Universal Studios Boulevard / W.C. Fields Drive (Study Int. No. 8)

    - The change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach under Future Cumulative with Project conditions increases by 194.1 feet (i.e., less than eight vehicles) during the weekday PM peak hour. It is noted that W.C. Fields Drive is designated as a Local Street – Standard under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. However, a potential improvement has been identified. The improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. As presented in *Table 7*, with the proposed improvement, the change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach under Future Cumulative with Project conditions is reduced by 480.3 feet (i.e., more than 19 vehicles) during the weekday PM peak hour.

- Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Study Int. No. 9)

    - The change in queue length associated with the Project at the southbound Universal Studios Boulevard left-turn approach under Future Cumulative with Project conditions increases by 106.6 feet (i.e., more than four vehicles) during the weekday PM peak hour. It is noted that Universal Studios Boulevard is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. However, a potential improvement has been identified. The improvement consists of updating the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. As presented in *Table 7*, with the proposed improvement, the change in queue length associated with the Project at the southbound Universal Studios Boulevard left-turn approach under Future Cumulative with Project conditions is reduced by 586.1 feet (i.e., more than 23 vehicles) during the weekday PM peak hour.

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

## Conclusions

The conclusions of this transportation analysis addendum for the Project are as follows:

- ***Project Description*** – The 2020 Project evaluated in the 2020 Approved Transportation Assessment has been revised. As proposed, the Project would improve and expand the Existing Hotel Building with the addition of the 18-story Hotel Expansion Building on the southern portion of the Project Site. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 square feet of restaurant floor area, and 9,570 square feet of spa floor area limited to guests and 250 non-guest members. The proposed restaurants include a 4,850 square-foot restaurant on Level B1, 1,200 square feet of pool food service/bar area, and a 5,950 square-foot restaurant and bar on the rooftop. Additionally, the Project would expand the northern portion of the Ancillary Hotel Building to include an additional 3,425 square feet of ancillary meeting space which would consist of four separate meeting rooms of less than 750 square feet each and a connecting hallway. An additional 464 parking spaces would be added to the Project Site as part of the Project, for a total of 1,116 parking spaces on-site. Construction and occupancy of the Project is proposed to be completed by the year 2027.

- ***Project Trip Generation*** – The Project is expected to generate 148 vehicle trips (94 inbound trips and 71 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Project is expected to generate 229 vehicle trips (129 inbound trips and 100 outbound trips). The Project is expected to generate 3,885 daily vehicle trips.

- ***Related Projects*** – The list of related projects has been updated to reflect known information current as of August 2022.

- ***CEQA Transportation Analysis***

    - *VMT Analysis (2022 TAG Threshold T-2.1)* – The VMT analysis provided in the 2020 Transportation Assessment has been updated based on the revised Project, as well as the 2022 TAG. The Project as designed, with the inclusion of four TDM strategies as Project Design Features outlined herein, will not result in a significant VMT impact. Furthermore, based on those TDM strategies, as well as the Project-related VMT analysis and the conclusions discussed herein (which demonstrate that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulatively significant VMT impacts are anticipated.

      Per LADOT's 2022 TAG, VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips. The assessment of visitor/guest trips can be completed on a qualitatively basis. Given the Project's location relative to Universal Studios Hollywood and Universal CityWalk, it is assumed that many hotel visitors/guests will walk between these destinations and the Project Site. These walking trips will potentially replace current vehicle trips to these destinations by the visitors staying at off-site hotels. Additionally, the Existing Hotel Building provides a shuttle service which transports visitors and guests to and from Universal Studios Hollywood and Universal CityWalk, which will be available to future visitors and guests of the Project, thereby further reducing vehicle trips. Furthermore, the Project will provide 62 bicycle parking spaces for visitors and guests per the requirements of the LAMC. As the Project will add 395 additional guestrooms within the direct vicinity of Universal Studios Hollywood and Universal CityWalk, will provide a shuttle transporting guests to and from these destinations, and will provide bicycle parking amenities, it is concluded that the Project will not contribute to significant visitor/guest trips, and therefore results in a "less than significant" VMT impact.

    - *Geometric Design Review (2022 TAG Threshold T-3)* – Given that the Project would not involve any modification of the current access point to the Project Site from the public right-of-way and based on a review of the forecast net new weekday AM and PM peak hour Project traffic volumes, the existing physical condition of the Project Site, and potential off-site pedestrian enhancements, no safety concerns related

to geometric design are noted. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, resulting in a less than significant impact determination.

While the Project will add more than 25 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project conditions increases by 24.4 feet (i.e., just less than one vehicle) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. As the change in queue length at the US-101 Freeway Southbound Off-Ramp right-turn approach would be less than the City's threshold of two vehicles, the Project would cause a less than significant freeway safety impact.

- ***Non-CEQA Transportation Analysis***

    - *Project Access and Circulation Review* – The Project's weekday AM and PM peak hour traffic volumes would not cause or substantially extend vehicle queuing at eight of the 11 study intersections analyzed. Physical improvements at the Universal Studios Boulevard / W.C. Fields Drive intersection (Study Int. No. 8) have been identified and are shown to improve traffic operations at this intersection. Modifications to existing traffic signal timing plan at the Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp intersection (Study Int. No. 9) have been identified and are shown to improve traffic operations at this intersection. The Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive intersection (Study Int. No. 3) is completely built out, therefore no physical modifications or improvements to the public right-of-way are feasible.

cc: File




N

NOT TO SCALE

MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ STUDY INTERSECTION

# FIGURE 1
# VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

o:\0593\dwg\figure 1 (vicinity map).dwg 07/27/2022 09:56:18 jshender llg exhibits color.ctb




NOT TO SCALE

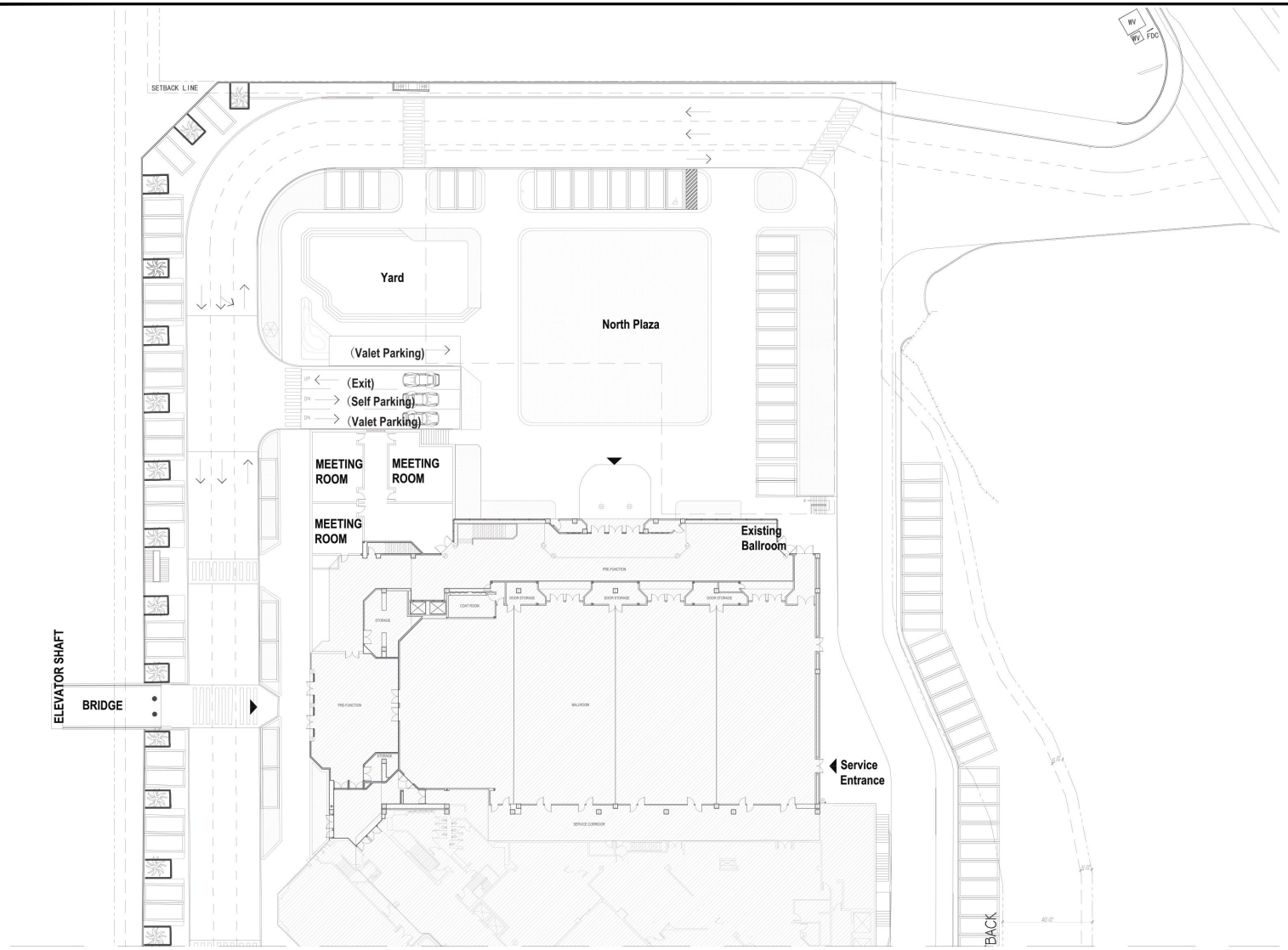
SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 2
# PROJECT CONCEPTUAL SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 2 (project site plan).dwg 09/19/2022 13:40:33 jshender llg bw standard-color.ctb




NOT TO SCALE

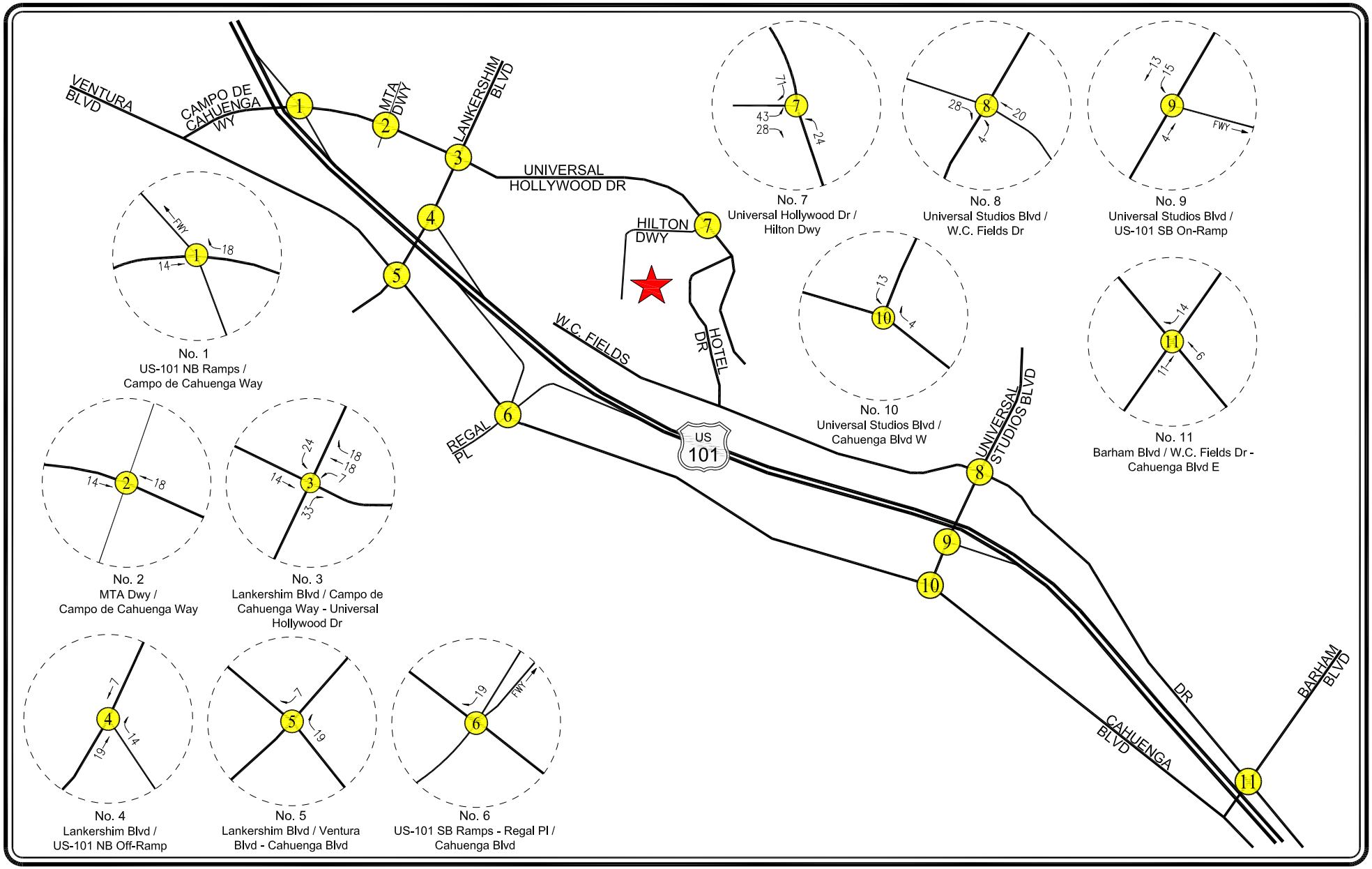
SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 3
# PROJECT SITE PLAN
## DROP-OFF/PICK-UP AREA (LEVEL 1 - NORTH)

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 3 (project site plan - valet drop-off_pick-up).dwg 08/25/2022 09:14:34 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

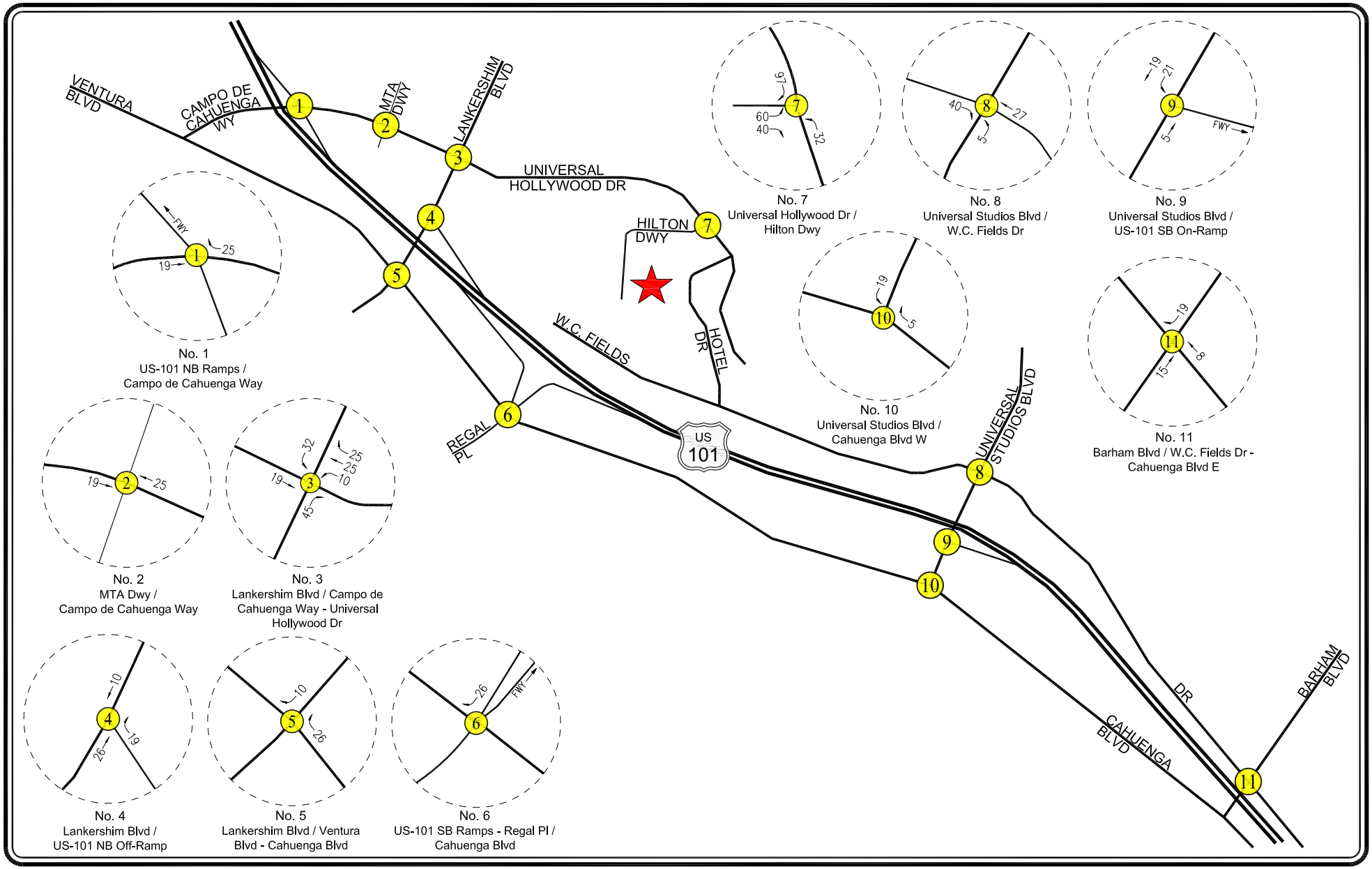
Ⓧ STUDY INTERSECTION

# FIGURE 4
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 4 (net new project traffic volumes - am peak hour).dwg 08/25/2022 09:16:26 jshender llg exhibits color.ctb




N

NOT TO SCALE

★ PROJECT SITE

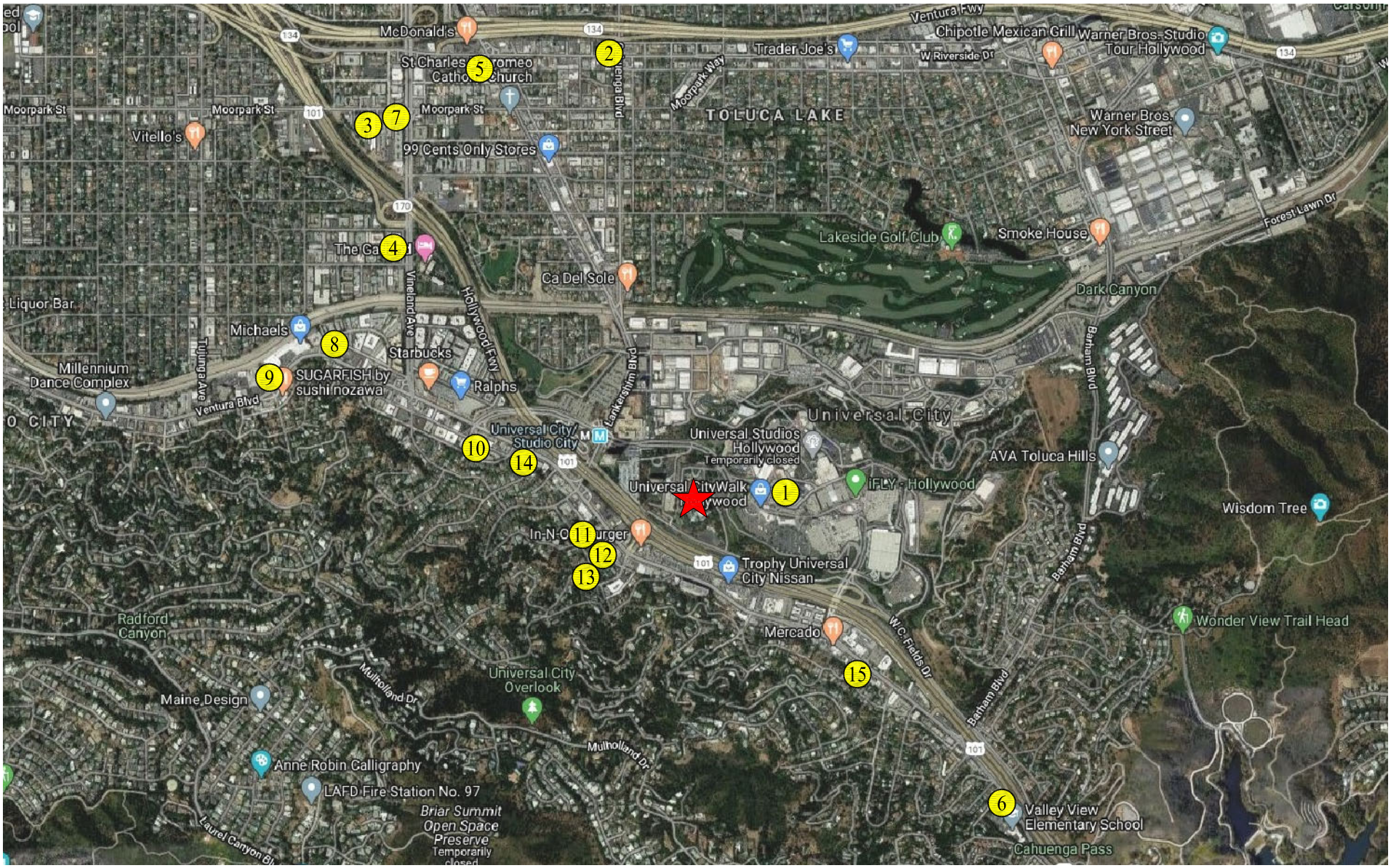
Ⓧ STUDY INTERSECTION

# FIGURE 5
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 5 (net new project traffic volumes - pm peak hour).dwg 08/25/2022 09:17:45 jshender llg exhibits color.ctb




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NOT TO SCALE

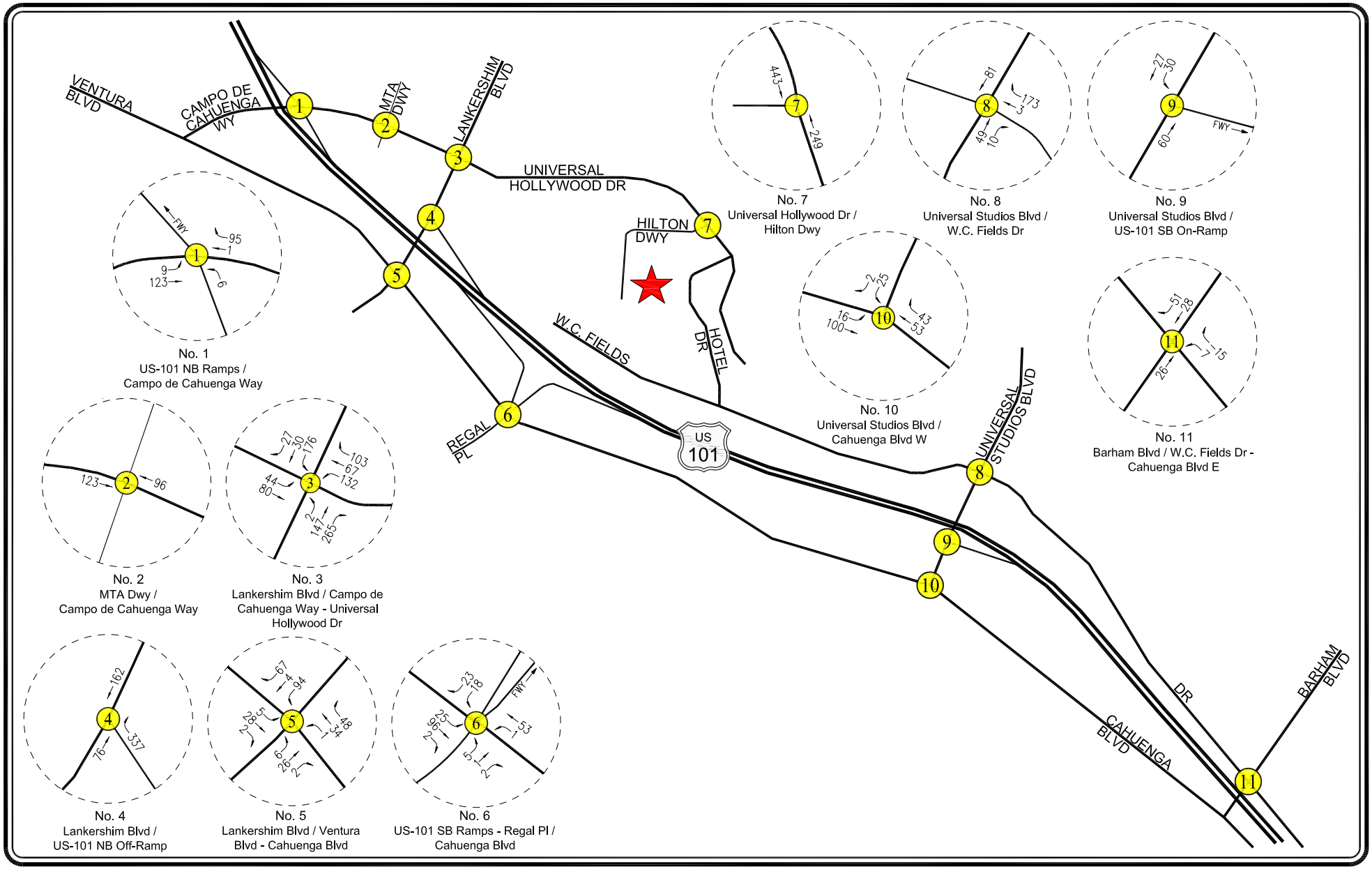
MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ RELATED PROJECT

# FIGURE 6
# LOCATION OF RELATED PROJECTS

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 6 (location of related projects).dwg 08/25/2022 09:19:49 jshender llg exhibits color.ctb




PROJECT SITE
STUDY INTERSECTION

N

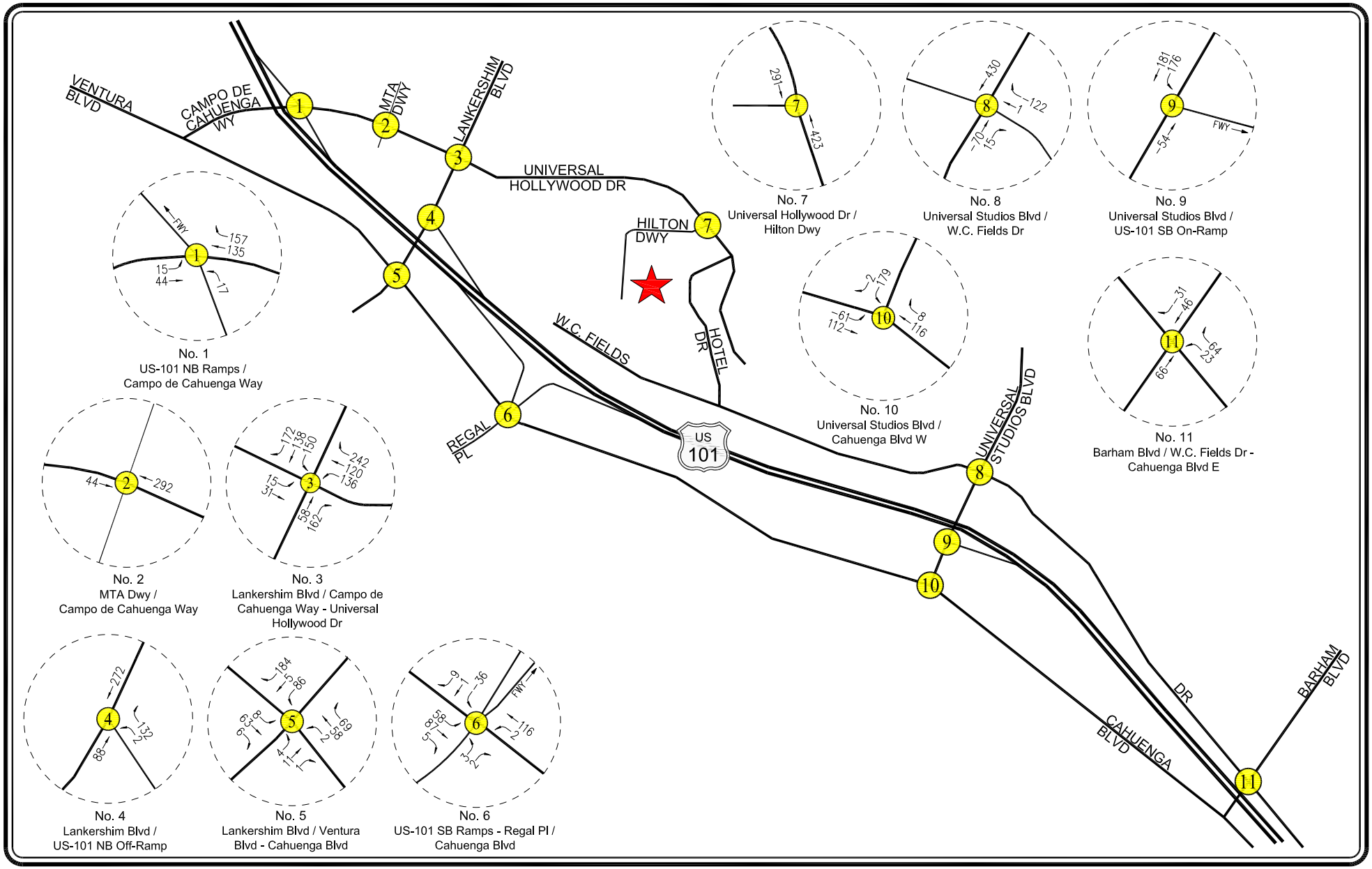
NOT TO SCALE

# FIGURE 7
# RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 7 (related projects traffic volumes - am peak hour).dwg 08/25/2022 10:40:58 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

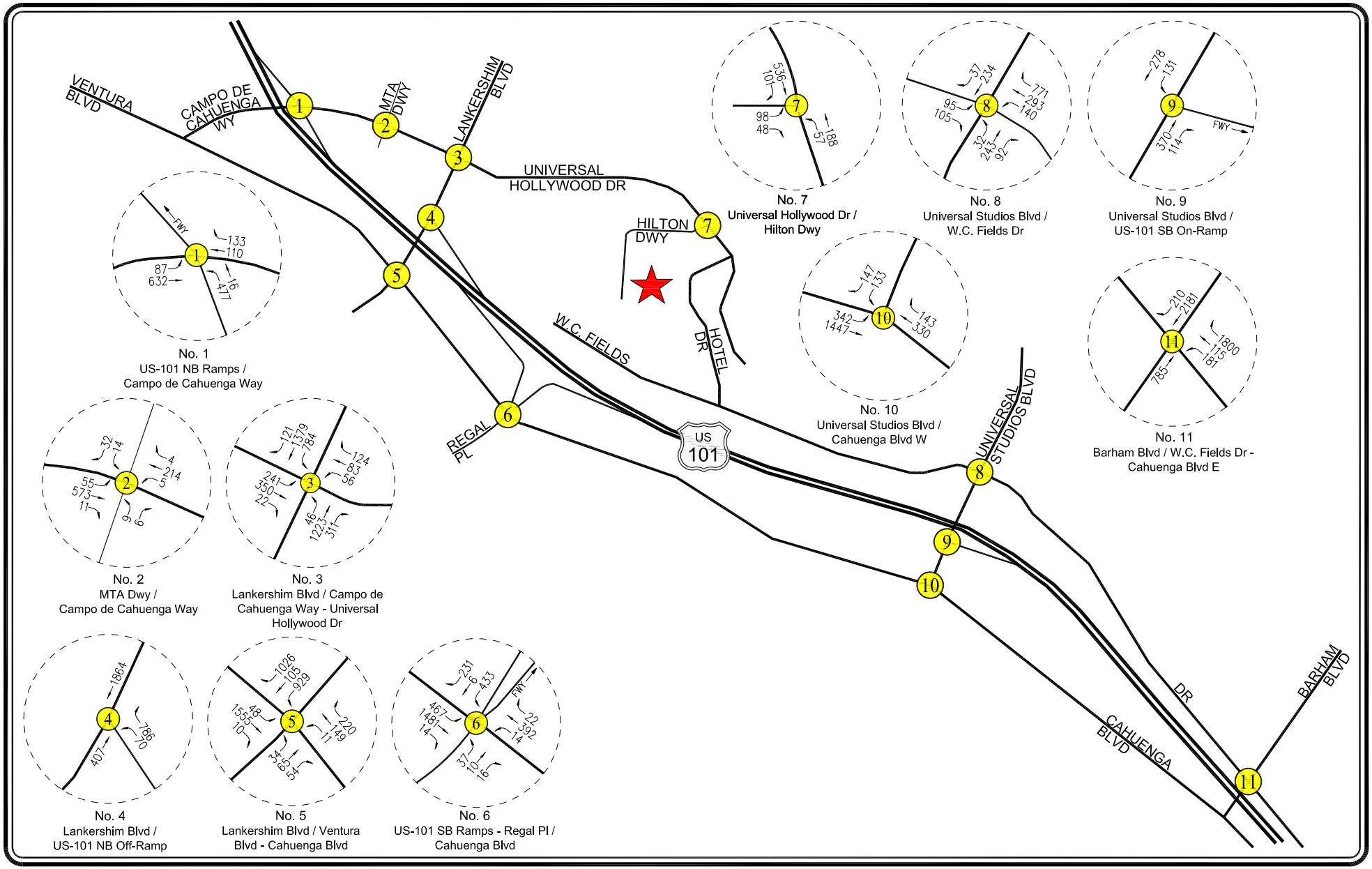
Ⓧ STUDY INTERSECTION

# FIGURE 8
# RELATED PROJECTS TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 8 (related projects traffic volumes - pm peak hour).dwg 08/25/2022 10:41:25 jshender llg exhibits color.ctb




N

NOT TO SCALE

★ PROJECT SITE

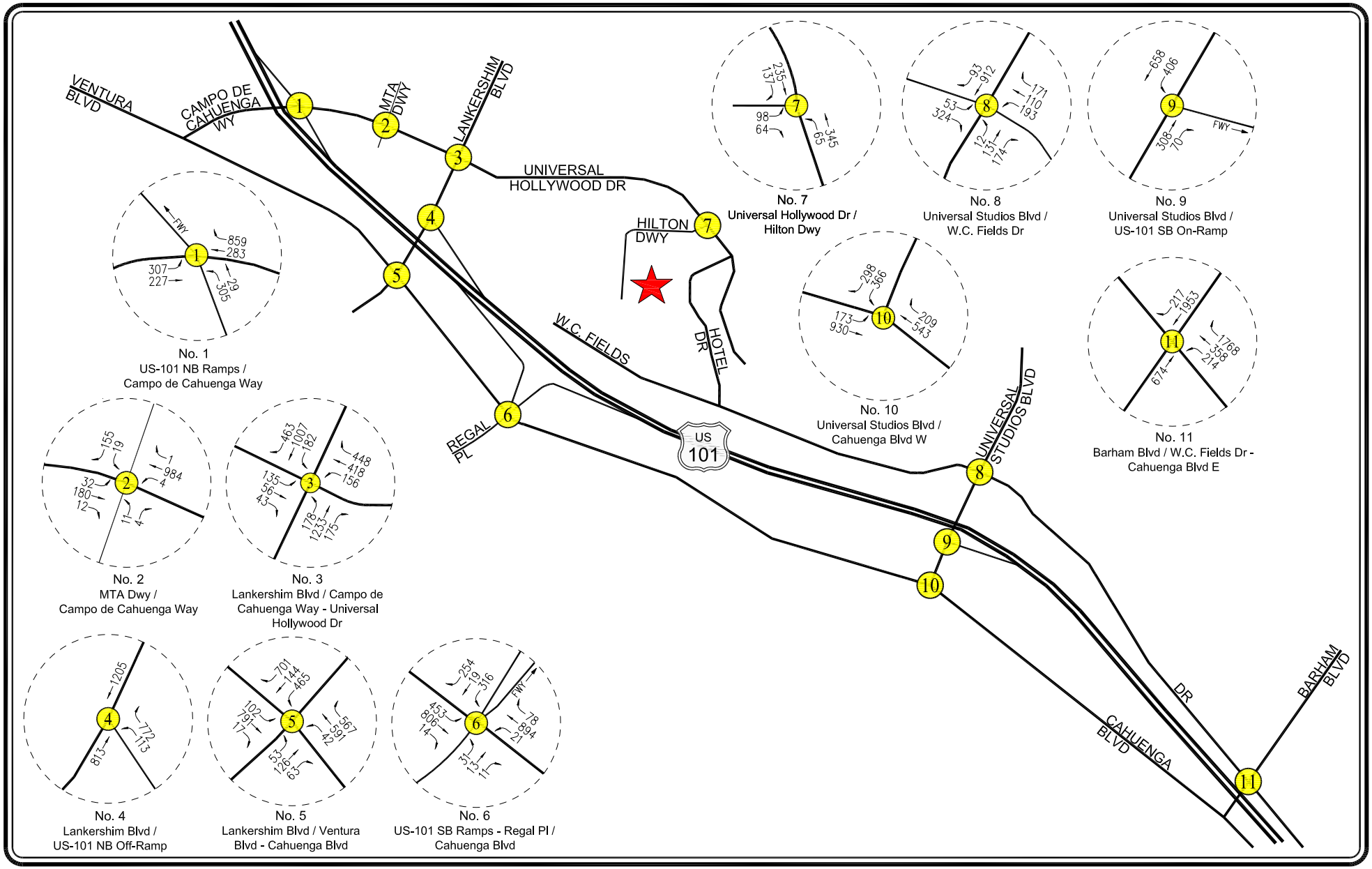
Ⓧ STUDY INTERSECTION

# FIGURE 9
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 9 (existing with project traffic volumes - am peak hour).dwg 08/25/2022 10:51:43 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

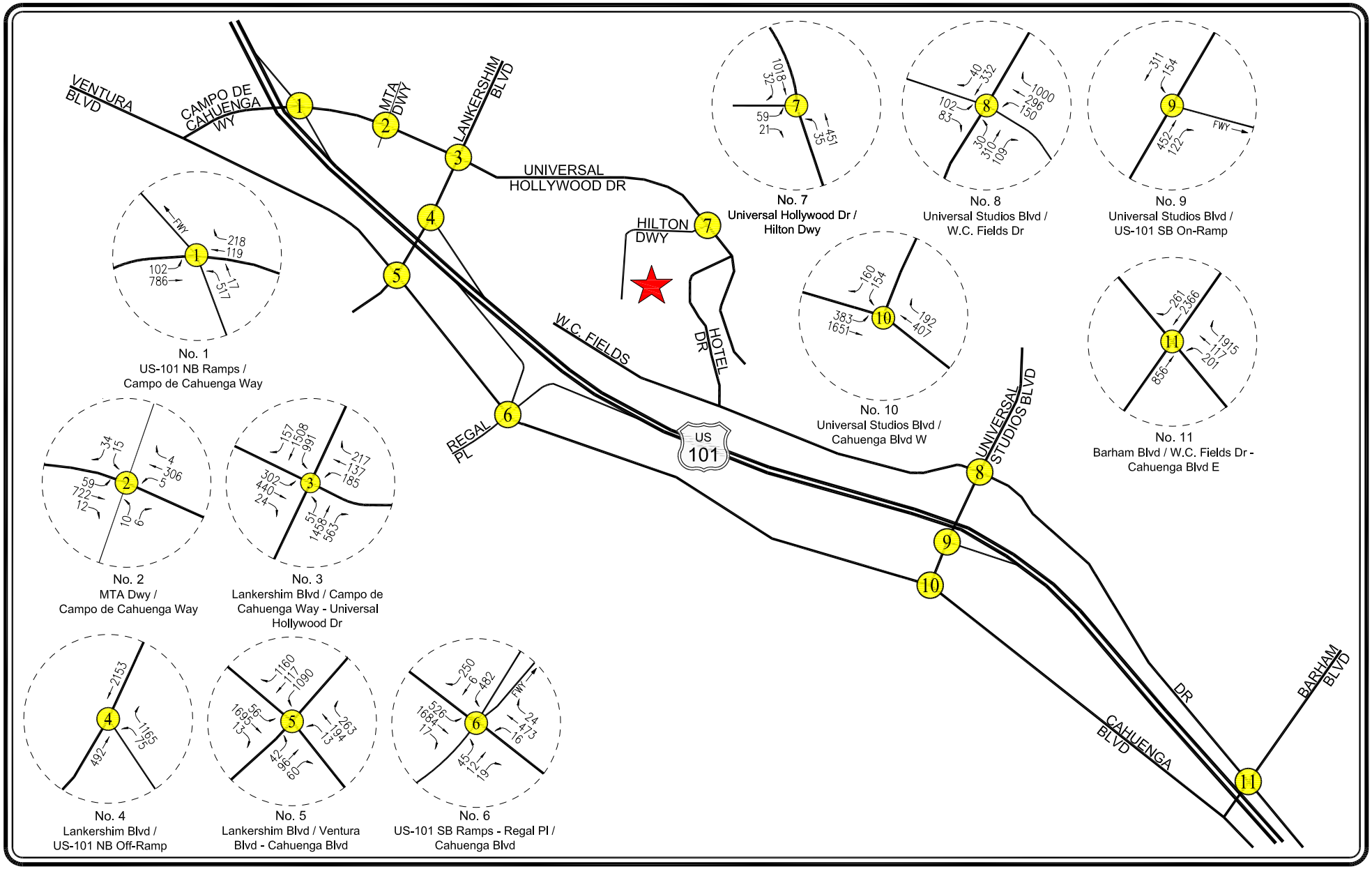
Ⓧ STUDY INTERSECTION

# FIGURE 10
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 10 (existing with project traffic volumes - pm peak hour).dwg 08/25/2022 11:07:05 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

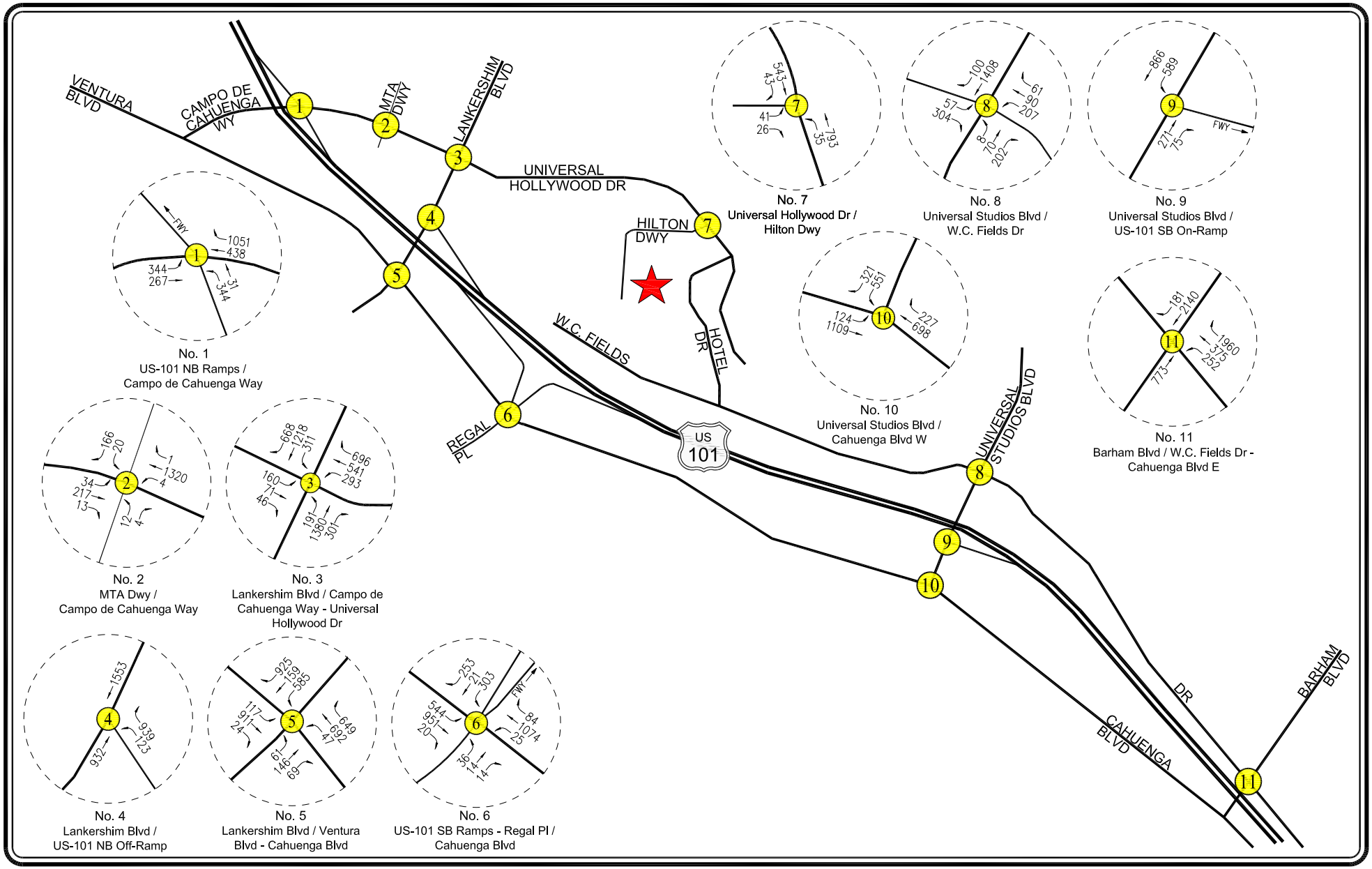
# FIGURE 11

# FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 11 (future cumulative baseline traffic volumes - am peak hour).dwg 08/25/2022 11:08:25 jshender llg exhibits color.ctb




N

NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

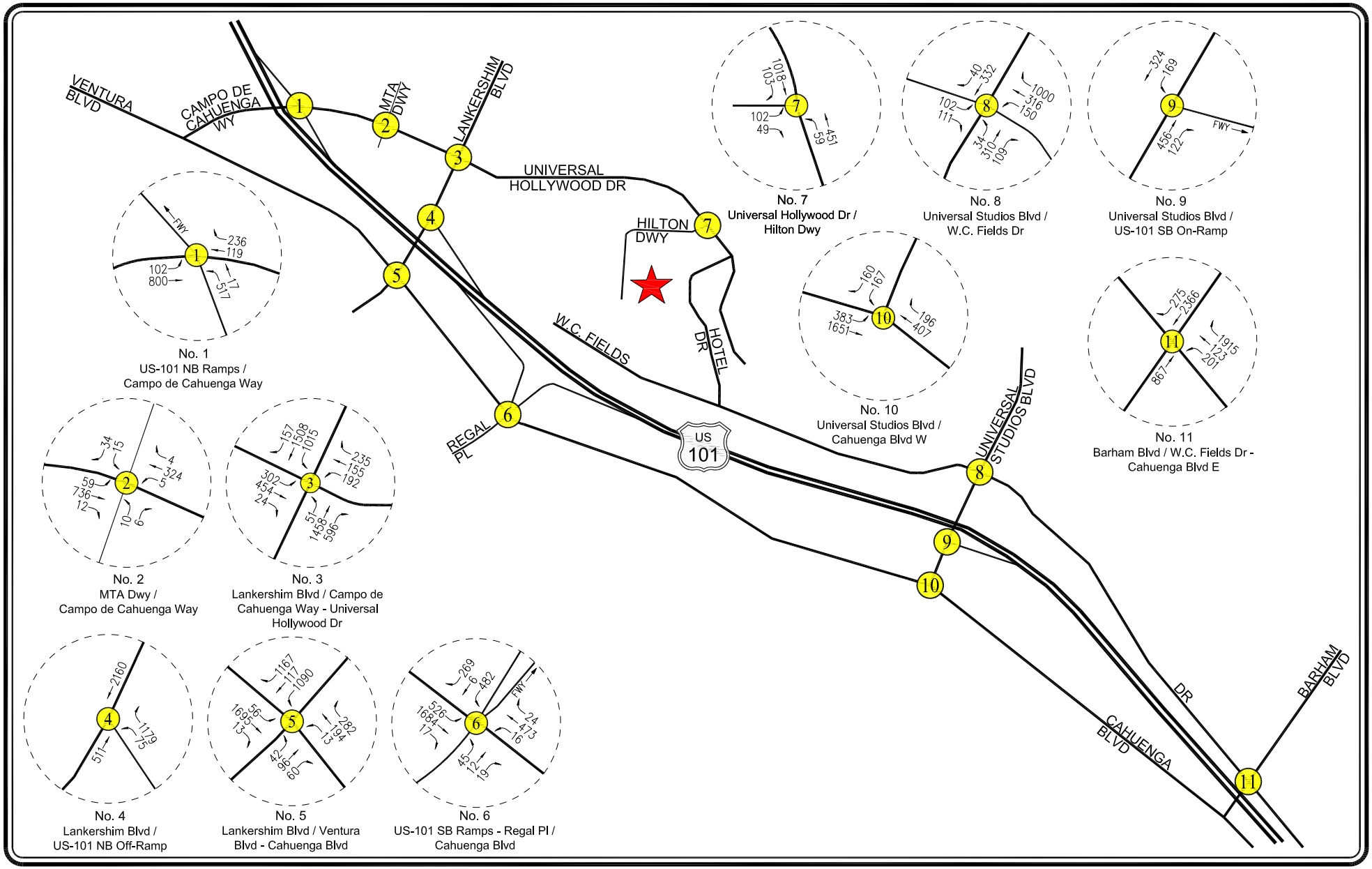
# FIGURE 12

# FUTURE CUMULATIVE BASELINE TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 12 (future cumulative baseline traffic volumes - pm peak hour).dwg 08/25/2022 11:09:06 jshender llg exhibits color.ctb




N

NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

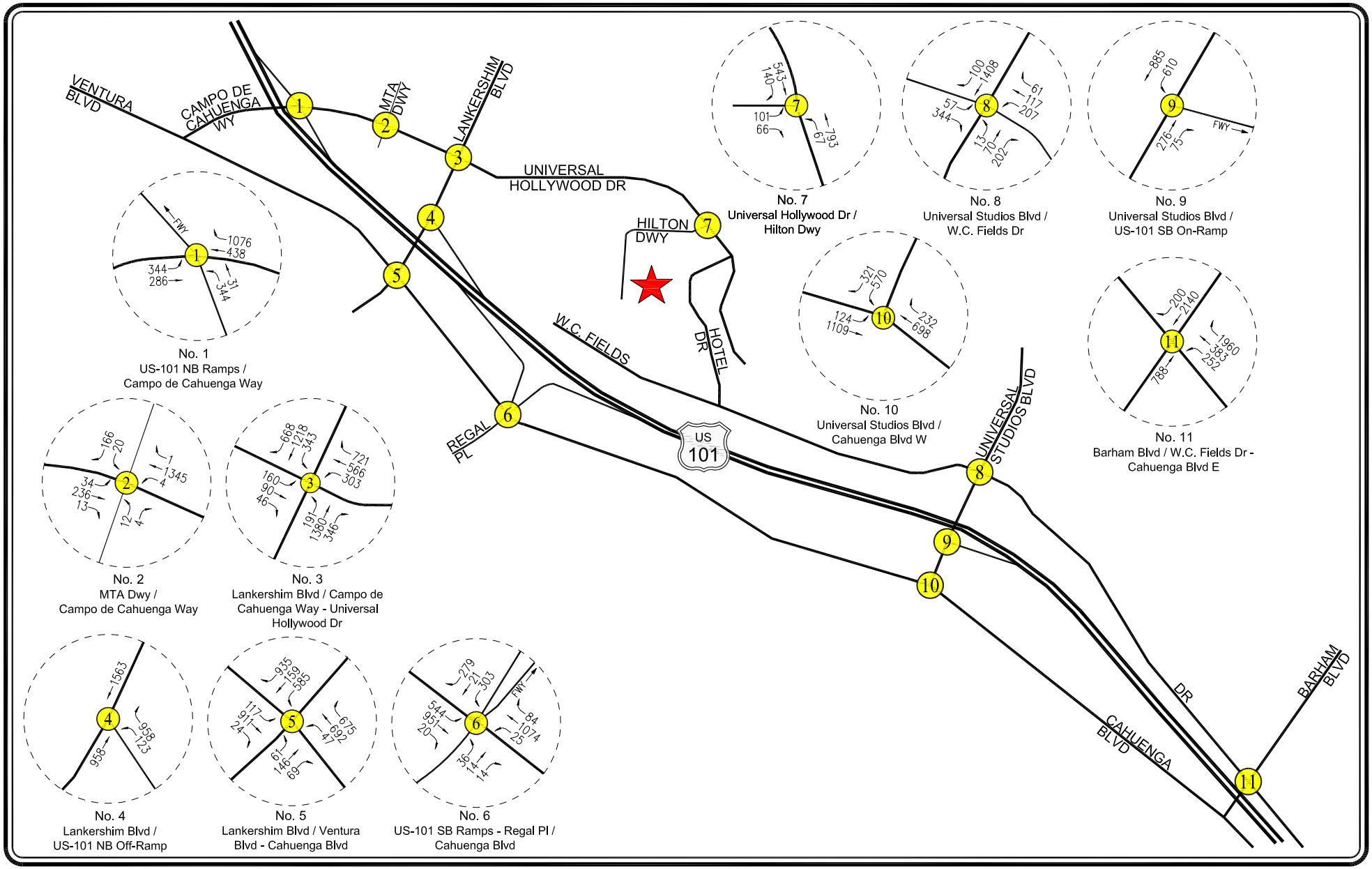
# FIGURE 13

# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 13 (future cumulative with project traffic volumes - am peak hour).dwg 08/25/2022 11:10:00 jshender llg exhibits color.ctb




N

NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

# FIGURE 14

# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 14 (future cumulative with project traffic volumes – pm peak hour).dwg 08/25/2022 11:10:42 jshender llg exhibits color.ctb

**Table 2**
**PROJECT TRIP GENERATION [1]**

19-Sep-22

| LAND USE | SIZE | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|
| | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| ***Proposed Project*** | | | | | | | |
| Hotel [3] | 395 Rooms | 102 | 80 | 182 | 119 | 114 | 233 |
| Spa [4] | 9,570 GSF | 7 | 6 | 13 | 19 | 14 | 33 |
| Level B1 and Poolside Restaurants [5] | 6,050 GSF | 32 | 26 | 58 | 34 | 21 | 55 |
| Rooftop Restaurant [6] | 5,950 GSF | 3 | 1 | 4 | 31 | 15 | 46 |
| **Subtotal** | | 144 | 113 | 257 | 203 | 164 | 367 |
| ***Transit/Walk-In Trips [7]*** | | | | | | | |
| Hotel (25%) | | (26) | (20) | (46) | (30) | (29) | (59) |
| Spa (25%) | | (2) | (2) | (4) | (5) | (4) | (9) |
| Level B1 and Poolside Restaurants (25%) | | (8) | (7) | (15) | (9) | (5) | (14) |
| Rooftop Restaurant (25%) | | (1) | 0 | (1) | (8) | (4) | (12) |
| **Subtotal** | | (37) | (29) | (66) | (52) | (42) | (94) |
| ***Internal Capture*** | | | | | | | |
| Spa [8] (25%) | | (1) | (1) | (2) | (4) | (3) | (7) |
| Level B1 and Poolside Restaurants [8] (25%) | | (6) | (5) | (11) | (6) | (4) | (10) |
| Rooftop Restaurant [9] (15%) | | 0 | 0 | 0 | (3) | (2) | (5) |
| Hotel [10] | | (6) | (7) | (13) | (9) | (13) | (22) |
| **Subtotal** | | (13) | (13) | (26) | (22) | (22) | (37) |
| **NET INCREASE PROJECT TRIPS** | | **94** | **71** | **165** | **129** | **100** | **229** |
| **NET 2020 APPROVED TRANSPORTATION ASSESSMENT TRIPS [11]** | | **89** | **59** | **148** | **139** | **107** | **246** |
| **NET DIFFERENCE** | | **5** | **12** | **17** | **(10)** | **(7)** | **(17)** |

[1] Source: ITE *Trip Generation Manual,* 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 310 (Hotel) trip generation average rates.
- AM Peak Hour Trip Rate: 0.46 trips/room; 56% inbound/44% outbound
- PM Peak Hour Trip Rate: 0.59 trips/room; 51% inbound/49% outbound

[4] ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates.
- AM Peak Hour Trip Rate: 1.31 trips/1,000 SF of floor area; 51% inbound/49% outbound
- PM Peak Hour Trip Rate: 3.45 trips/1,000 SF of floor area; 57% inbound/43% outbound

[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 9.57 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.05 trips/1,000 SF of floor area; 61% inbound/39% outbound

[6] ITE Land Use Code 931 (Fine Dining Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 0.73 trips/1,000 SF of floor area; assume 80% inbound/20% outbound
- PM Peak Hour Trip Rate: 7.80 trips/1,000 SF of floor area; 67% inbound/33% outbound

[7] The transit reduction is based on the site's proximity to the Metro B Line (Red) rail station and has been applied to the all components of the Project based on the *LADOT Transportation Assessment Guidelines,* August 2022. The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding uses (i.e., Universal Studios Hollywood, Universal CityWalk)

[8] The internal capture reduction for the spa, Level B1 Restaurant, and Poolside Restaurant uses is based on the synergy between the hotel and the spa, Level B1 Restaurant, and Poolside Restaurant uses provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.

[9] The internal capture reduction for the Rooftop Restaurant use is based on the synergy between the hotel and the Rooftop Restaurant use provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.

[10] For each internal capture trip related to the spa and restaurant uses, a corresponding internal capture trip reduction is assumed for the hotel use.

[11] From Table 2-1 of 2020 Approved Transportation Assessment.

**Table 4**
**RELATED PROJECTS LIST AND TRIP GENERATION [1]**

16-Sep-22

| MAP NO. | PROJECT NAME/ PROJECT NUMBER | PROJECT STATUS | ADDRESS/ LOCATION | LAND USE DATA | | PROJECT DATA SOURCE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LAND-USE | SIZE | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| 1 | NBC Universal Evolution Plan | Approved | 555 E. Universal Hollywood Drive | Studio<br>Studio Office<br>Office<br>Entertainment<br>Entertainment Retail<br>Amphitheater<br>Hotel | 307,949 GSF<br>647,320 GSF<br>470,247 GSF<br>177,447 GSF<br>39,216 GLSF<br>(50,600) GSF<br>900,000 GSF | [3] | 19,139 | 1,271 | 489 | 1,760 | 307 | 1,391 | 1,698 |
| 2 | Cohen Apartments | Approved | 10601-10623 Riverside Drive | Apartments<br>Retail | 68 DU<br>12,451 GSF | | 1,083 | 17 | 39 | 56 | 47 | 36 | 83 |
| 3 | 11036 W. Moorpark Street Apartments Project | Built | 11036 W. Moorpark Street | Apartments<br>Single-Family Homes | 96 DU<br>(8) DU | | 506 | 7 | 32 | 39 | 31 | 16 | 47 |
| 4 | 4215 Vineland Avenue Condominiums Project | Approved | 4215 Vineland Avenue | Condominiums<br>Apartments<br>Single-Family Homes | 85 DU<br>(32) DU<br>(1) DU | [4] | 271 | 3 | 17 | 20 | 15 | 8 | 23 |
| 5 | Lankershim/Riverside Mixed-Use Project | Approved | 10850 Riverside Drive | Apartments<br>Retail | 179 DU<br>5,684 GLSF | [5] | 1,336 | 21 | 62 | 83 | 69 | 44 | 113 |
| 6 | 3077 Cahuenga Boulevard Studio Apartments Project | Proposed | 3077 Cahuenga Boulevard | Apartments | 179 DU | | 299 | 5 | 18 | 23 | 10 | 18 | 28 |
| 7 | Gas Station with Convenience Store and Car Wash | Proposed | 4377 N. Vineland Avenue | Convenience Store<br>Car Wash | 2,555 GSF<br>1,100 GSF | | 645 | 21 | 22 | 43 | 20 | 21 | 41 |
| 8 | 11201 Ventura Boulevard Mixed-Use Project | Approved | 11201 Ventura Boulevard | Apartments<br>Affordable Family Housing<br>Retail<br>Assisted Living | 94 DU<br>12 DU<br>1,201 GSF<br>(58) Beds | [6] | 462 | 5 | 26 | 31 | 23 | 10 | 33 |
| 9 | Studio City Crossings | Proposed | 11265-11321 Ventura Boulevard | Supermarket<br>Commercial<br>Restaurant<br>Commercial<br>Health/Fitness Club<br>Restaurant | 34,832 GSF<br>5,053 GSF<br>2,775 GSF<br>(13,629) GSF<br>(17,810) GSF<br>(2,775) GSF | [7] | 1,883 | 20 | 1 | 21 | 71 | 77 | 148 |
| 10 | 10867 Fruitland Drive Apartments Project | Under Construction | 10867 Fruitland Drive | Apartments<br>Afforable Family Housing<br>Apartments | 16 DU<br>3 DU<br>(5) DU | [8]<br>[9]<br>[8] | 108<br>12<br>(34) | 1<br>1<br>0 | 5<br>1<br>(2) | 6<br>2<br>(2) | 5<br>1<br>(2) | 3<br>0<br>(1) | 8<br>1<br>(3) |
| 11 | 3910 Kentucky Drive Apartments Project | Under Construction | 3910 Kentucky Drive | Apartments | 8 DU | [8] | 54 | 1 | 2 | 3 | 3 | 1 | 4 |
| 12 | 3902 Kentucky Drive Condominiums Project | Approved | 3902 Kentucky Drive | Condominiums | 21 DU | [8] | 142 | 2 | 6 | 8 | 7 | 4 | 11 |
| 13 | 3657 Regal Place Apartments Project | Under Construction | 3657 Regal Place | Apartments<br>Apartments | 28 DU<br>(5) DU | [8]<br>[8] | 189<br>(34) | 3<br>0 | 8<br>(2) | 11<br>(2) | 9<br>(2) | 5<br>(1) | 14<br>(3) |

**Table 4 (Continued)**
**RELATED PROJECTS LIST AND TRIP GENERATION [1]**

16-Sep-22

| MAP NO. | PROJECT NAME/ PROJECT NUMBER | PROJECT STATUS | ADDRESS/ LOCATION | LAND USE DATA | | PROJECT DATA SOURCE | DAILY TRIP ENDS [2] VOLUMES | AM PEAK HOUR VOLUMES [2] | | | PM PEAK HOUR VOLUMES [2] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LAND-USE | SIZE | | | IN | OUT | TOTAL | IN | OUT | TOTAL |
| 14 | 10740-10744 Ventura Boulevard Hotel Project | Approved | 10740-10744 Ventura Boulevard | Hotel | 46 Rooms | [10] | 368 | 12 | 9 | 21 | 14 | 13 | 27 |
| | | | | Restaurant | 1,840 GSF | [11] | 197 | 10 | 8 | 18 | 10 | 7 | 17 |
| | | | | Rooftop Bar | 3,495 GSF | [12], [13], 14] | 397 | -- | -- | -- | 26 | 14 | 40 |
| 15 | 3429 Cahuenga Boulevard Mixed-Use Project | Proposed | 3361-3429 Cahuenga Boulevard West | Apartments | 64 DU | [8] | 431 | 6 | 20 | 26 | 21 | 12 | 33 |
| | | | | Afforable Family Housing | 8 DU | [9] | 33 | 2 | 2 | 4 | 2 | 1 | 3 |
| | | | | Hotel | 119 Rooms | [10] | 951 | 31 | 24 | 55 | 36 | 34 | 70 |
| | | | | Restaurant | 4,429 GSF | [11] | 475 | 23 | 19 | 42 | 24 | 16 | 40 |
| | | | | Supermarket | 18,428 GSF | [15] | 1,729 | 31 | 22 | 53 | 83 | 82 | 165 |
| | | | | Restaurant | (3,404) GSF | [11] | (365) | (18) | (15) | (33) | (19) | (12) | (31) |
| | | | | Office | (29,199) GSF | [16] | (317) | (39) | (5) | (44) | (7) | (35) | (42) |
| TOTAL | | | | | | | 29,960 | 1,436 | 808 | 2,244 | 804 | 1,764 | 2,568 |

[1] Source: City of Los Angeles Department of Transportation Related Projects List and City of Los Angeles Department of City Planning.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: NBC Universal Evolution Plan Environmental Impact Report Alternative 10, August 2012.
[4] Source: Technical Memorandum for the 4215 Vineland Condominiums Project, prepared by Linscott, Law & Greenspan, Engineers, April 19, 2016.
[5] Source: Technical Memorandum for the Lankershim/Riverside Mixed-Use Project, prepared by Linscott, Law & Greenspan, Engineers, September 17, 2018.
[6] Source: Revised Traffic Assessment for the Proposed Mixed-Use Project at 11201 Ventura Boulevard, Los Angeles Department of Transportation, January 29, 2019.
[7] Source: Transportation Assessment for the Studio City Crossings Project, prepared by Linscott, Law, & Greenspan, Engineers, March 29, 2021.
[8] ITE Land Use Code 220 (Multifamily Housing [Low-Rise]) trip generation average rates.
[9] LADOT Affordable Housing (Family) trip generation average rates.
[10] ITE Land Use Code 310 (Hotel) trip generation average rates.
[11] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
[12] ITE Land Use Code 975 (Drinking Place) trip generation average rates.
[13] Rooftop Bar assumed to generate negligible trips during the AM peak hour.
[14] Daily trip rates for ITE Land Use Code 975 (Drinking Place) are not provided. Assume PM peak hour trips represent 10% of daily trips.
[15] ITE Land Use Code 850 (Supermarket) trip generation average rates.
[16] ITE Land Use Code 710 (General Office Building) trip generation average rates.

## Table 5
## CITY OF LOS ANGELES VMT IMPACT CRITERIA [1]

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

[1] Source: *LADOT Transportation Assessment Guidelines,* August 2022.

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

**Table 6**
**FREEWAY OFF-RAMP QUEUE EVALUATION**
**US-101 FREEWAY SOUTHBOUND OFF-RAMP AT LANKERSHIM BOULEVARD**
**WEEKDAY PM PEAK HOUR**

16-Sep-22

| NO. | INTERSECTION | RAMP AND LANE DESCRIPTION | VEHICLE STORAGE CAPACITY [a] | [1] YEAR 2020 EXISTING | | [2] YEAR 2020 EXISTING W/ PROJECT | | | | [3] YEAR 2027 FUTURE W/O PROJECT | | [4] YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] |
| 6 | Cahuenga Boulevard / US-101 Freeway Southbound Ramps - Regal Place | US-101 Southbound Off-Ramp | | | | | | | | | | | | | |
| | | Left | 300 | 258.3 | NO | 258.3 | NO | 0.0 | NO | 247.2 | NO | 247.2 | NO | 0.0 | NO |
| | | Shared Left/Through | 300 | 149.9 | NO | 149.9 | NO | 0.0 | NO | 146.7 | NO | 146.7 | NO | 0.0 | NO |
| | | Right | 300 | 219.7 | NO | 243.3 | NO | 23.6 | NO | 242.5 | NO | 266.9 | NO | 24.4 | NO |
| | | Ramp [d] | 564 | 0.0 | NO | 0.0 | NO | 0.0 | NO | 0 | NO | 0 | NO | 0.0 | NO |

[a] Expressed in feet.
[b] Pursuant to *LADOT Transportation Assessment Guidelines,* August 2022, the Highway Capacity Manual (HCM) methodology for signalized intersections was utilized to calculate vehicle queuing. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.
[c] Pursuant to *LADOT Transportation Assessment Guidelines, August 2022,* a freeway safety impact shall be deemed significantif a Project is expected to cause or add to a queue extending onto the freeway mainline by more than two vehicle lengths.
[d] The Ramp is the remaining length of the off-ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline.

**Table 7**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

16-Sep-22

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | | YEAR 2027 FUTURE W/ PROJECT + IMPROVEMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way | Signalized | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 0.0 | 28.2 | C | 304.2 | 28.2 | C | 304.2 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 0.0 | 24.5 | C | 187.2 | 24.5 | C | 187.2 | 0.0 | -- | -- | -- | -- |
| | | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 0.0 | 24.0 | C | 161.1 | 24.0 | C | 161.1 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 0.0 | 23.1 | C | 110.8 | 23.1 | C | 110.8 | 0.0 | -- | -- | -- | -- |
| | | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 0.0 | 38.5 | D | 116.9 | 38.5 | D | 116.9 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 0.0 | 175.0 | F | 680.5 | 175.0 | F | 680.5 | 0.0 | -- | -- | -- | -- |
| | | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.2 | 3.0 | 11.9 | B | 155.6 | 12.0 | B | 159.2 | 3.6 | -- | -- | -- | -- |
| | | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.1 | 3.1 | 10.3 | B | 42.9 | 10.3 | B | 46.2 | 3.3 | -- | -- | -- | -- |
| | | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 0.0 | 21.4 | C | 48.4 | 21.4 | C | 48.4 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 0.0 | 24.2 | C | 183.4 | 24.2 | C | 183.4 | 0.0 | -- | -- | -- | -- |
| | | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 55.5 | 7.9 | 23.0 | C | 94.6 | 23.2 | C | 103.2 | 8.6 | -- | -- | -- | -- |
| | | | | PM | 38.1 | D | 400.5 | 40.0 | D | 420.1 | 19.6 | 79.8 | F | 680.1 | 88.8 | F | 730.5 | 50.4 | -- | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way | Signalized | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 0.0 | 11.6 | B | 3.8 | 11.6 | B | 3.8 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 0.0 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | 0.0 | -- | -- | -- | -- |
| | | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 0.0 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 0.0 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 0.0 | -- | -- | -- | -- |
| | | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 0.0 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 0.0 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | 0.0 | -- | -- | -- | -- |
| | | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 0.0 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 0.0 | 13.2 | B | 62.8 | 13.2 | B | 62.8 | 0.0 | -- | -- | -- | -- |
| | | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 0.1 | 7.5 | A | 18.5 | 7.6 | A | 18.6 | 0.1 | -- | -- | -- | -- |
| | | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 0.1 | 12.4 | B | 14.9 | 12.6 | B | 15.1 | 0.2 | -- | -- | -- | -- |
| | | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.4 | 1.3 | 7.2 | A | 68.4 | 7.3 | A | 70.2 | 1.8 | -- | -- | -- | -- |
| | | | | PM | 6.0 | A | 12.4 | 6.0 | A | 13.8 | 1.4 | 6.1 | A | 16.7 | 6.1 | A | 18.2 | 1.5 | -- | -- | -- | -- |
| | | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.6 | 1.4 | 7.6 | A | 72.9 | 7.7 | A | 74.7 | 1.8 | -- | -- | -- | -- |
| | | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.6 | 1.4 | 6.2 | A | 17.7 | 6.2 | A | 19.2 | 1.5 | -- | -- | -- | -- |
| | | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 0.1 | 8.3 | A | 1.8 | 8.3 | A | 1.8 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 0.0 | 6.4 | A | 1.0 | 6.4 | A | 1.0 | 0.0 | -- | -- | -- | -- |
| | | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.9 | 1.6 | 6.3 | A | 25.9 | 6.3 | A | 27.4 | 1.5 | -- | -- | -- | -- |
| | | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.3 | 2.7 | 8.6 | A | 125.4 | 8.6 | A | 128.6 | 3.2 | -- | -- | -- | -- |
| | | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.9 | 1.7 | 6.4 | A | 27.5 | 6.5 | A | 29.1 | 1.6 | -- | -- | -- | -- |
| | | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.6 | 2.9 | 9.4 | A | 135.8 | 9.5 | A | 139.4 | 3.6 | -- | -- | -- | -- |

**Table 7 (Continued)**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | | YEAR 2027 FUTURE W/ PROJECT + IMPROVEMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive | Signalized | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 0.0 | 36.3 | D | 48.1 | 36.3 | D | 48.1 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 0.0 | 152.8 | F | 395.8 | 152.8 | F | 395.8 | 0.0 | -- | -- | -- | -- |
| | | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 0.0 | 31.5 | C | 392.7 | 31.5 | C | 392.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 0.0 | 32.2 | C | 407.8 | 32.2 | C | 407.8 | 0.0 | -- | -- | -- | -- |
| | | | NB Right | AM | 18.1 | B | 186.6 | 18.8 | B | 208.9 | 22.3 | 27.6 | C | 419.7 | 29.8 | C | 458.3 | 38.6 | -- | -- | -- | -- |
| | | | | PM | 14.5 | B | 81.0 | 15.2 | B | 113.1 | 32.1 | 17.6 | B | 211.1 | 18.7 | B | 244.2 | 33.1 | -- | -- | -- | -- |
| | | | SB Left | AM | 204.3 | F | 763.3 | 222.5 | F | 820.2 | 56.9 | 382.5 | F | 1324.6 | 401.3 | F | 1383.5 | 58.9 | -- | -- | -- | -- |
| | | | | PM | 42.6 | D | 84.7 | 43.8 | D | 105.3 | 20.6 | 77.3 | E | 240.7 | 103.2 | F | 296.5 | 55.8 | -- | -- | -- | -- |
| | | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 0.0 | 32.4 | C | 410.5 | 32.4 | C | 410.5 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 0.0 | 29.5 | C | 349.1 | 29.5 | C | 349.1 | 0.0 | -- | -- | -- | -- |
| | | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 0.0 | 23.6 | C | 8.2 | 23.6 | C | 8.2 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 0.0 | 154.9 | F | 1225.4 | 154.9 | F | 1225.4 | 0.0 | -- | -- | -- | -- |
| | | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 0.0 | 57.5 | E | 194.8 | 57.5 | E | 194.8 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 0.0 | 40.6 | D | 89.8 | 40.6 | D | 89.8 | 0.0 | -- | -- | -- | -- |
| | | | EB Through | AM | 47.6 | D | 206.6 | 49.4 | D | 216.8 | 10.2 | 72.3 | E | 310.3 | 78.2 | E | 330.1 | 19.8 | -- | -- | -- | -- |
| | | | | PM | 34.7 | C | 37.5 | 35.0 | C | 51.5 | 14.0 | 35.2 | D | 61.2 | 35.4 | D | 71.6 | 10.4 | -- | -- | -- | -- |
| | | | EB Right | AM | 48.1 | D | 205.6 | 50.0 | D | 215.9 | 10.3 | 73.6 | E | 309.8 | 79.6 | E | 329.3 | 19.5 | -- | -- | -- | -- |
| | | | | PM | 35.0 | C | 44.1 | 35.1 | D | 50.1 | 6.0 | 35.3 | D | 59.5 | 35.5 | D | 69.5 | 10.0 | -- | -- | -- | -- |
| | | | WB Left | AM | 40.8 | D | 50.5 | 41.1 | D | 58.0 | 7.5 | 85.3 | F | 278.3 | 94.6 | F | 301.2 | 22.9 | -- | -- | -- | -- |
| | | | | PM | 47.2 | D | 185.2 | 50.2 | D | 202.0 | 16.8 | 223.5 | F | 691.3 | 242.5 | F | 741.2 | 49.9 | -- | -- | -- | -- |
| | | | WB Through | AM | 38.0 | D | 31.9 | 38.2 | D | 40.9 | 9.0 | 38.8 | D | 68.6 | 39.0 | D | 78.0 | 9.4 | -- | -- | -- | -- |
| | | | | PM | 40.6 | D | 219.4 | 41.9 | D | 234.4 | 15.0 | 58.5 | E | 338.2 | 66.7 | E | 372.7 | 34.5 | -- | -- | -- | -- |
| | | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 102.2 | 16.1 | 28.6 | C | 190.6 | 29.1 | C | 205.0 | 14.4 | -- | -- | -- | -- |
| | | | | PM | 84.6 | F | 597.4 | 103.0 | F | 686.8 | 89.4 | 353.4 | F | 1909.8 | 380.2 | F | 2041.5 | 131.7 | -- | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp | Signalized | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.6 | 5.6 | 11.6 | B | 127.5 | 11.7 | B | 133.5 | 6.0 | -- | -- | -- | -- |
| | | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.3 | 8.1 | 14.3 | B | 272.0 | 14.5 | B | 280.7 | 8.7 | -- | -- | -- | -- |
| | | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.7 | 1.8 | 19.4 | B | 467.3 | 19.5 | B | 469.4 | 2.1 | -- | -- | -- | -- |
| | | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.3 | 2.3 | 15.2 | C | 310.4 | 15.3 | C | 313.1 | 2.7 | -- | -- | -- | -- |
| | | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 0.0 | 21.4 | C | 54.7 | 21.4 | C | 54.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 0.0 | 22.2 | C | 95.7 | 22.2 | C | 95.7 | 0.0 | -- | -- | -- | -- |
| | | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.6 | 9.0 | 129.5 | F | 949.0 | 135.5 | F | 983.3 | 34.3 | -- | -- | -- | -- |
| | | | | PM | 32.9 | C | 348.1 | 34.0 | C | 361.4 | 13.3 | 58.6 | E | 547.8 | 63.9 | F | 578.7 | 30.9 | -- | -- | -- | -- |

**Table 7 (Continued)**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | | YEAR 2027 FUTURE W/ PROJECT + IMPROVEMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard | Signalized | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 0.0 | 38.2 | D | 204.9 | 38.2 | D | 204.9 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 0.0 | 48.0 | D | 298.6 | 48.0 | D | 298.6 | 0.0 | -- | -- | -- | -- |
| | | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 0.0 | 338.6 | F | 1875.0 | 338.6 | F | 1875.0 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 0.0 | 53.2 | D | 415.1 | 53.2 | D | 415.1 | 0.0 | -- | -- | -- | -- |
| | | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 0.0 | 97.1 | F | 658.5 | 97.1 | F | 658.5 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 0.0 | 42.5 | D | 341.0 | 42.5 | D | 341.0 | 0.0 | -- | -- | -- | -- |
| | | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- | -- | -- |
| | | | | PM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- | -- | -- |
| | | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 0.0 | 20.4 | C | 38.3 | 20.4 | C | 38.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 0.0 | 23.9 | C | 83.5 | 23.9 | C | 83.5 | 0.0 | -- | -- | -- | -- |
| | | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 0.0 | 30.2 | C | 450.6 | 30.2 | C | 450.6 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 0.0 | 22.7 | C | 229.0 | 22.7 | C | 229.0 | 0.0 | -- | -- | -- | -- |
| | | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 0.0 | 33.9 | C | 472.8 | 33.9 | C | 472.8 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 0.0 | 23.6 | C | 232.9 | 23.6 | C | 232.9 | 0.0 | -- | -- | -- | -- |
| | | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 0.0 | 42.1 | D | 16.3 | 42.1 | D | 16.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 0.0 | 33.1 | C | 47.5 | 33.1 | C | 47.5 | 0.0 | -- | -- | -- | -- |
| | | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 0.0 | 30.6 | C | 87.2 | 30.6 | C | 87.2 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 0.0 | 42.1 | D | 334.3 | 42.1 | D | 334.3 | 0.0 | -- | -- | -- | -- |
| | | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 136.5 | 13.6 | 16.4 | B | 169.0 | 16.7 | B | 184.2 | 15.2 | -- | -- | -- | -- |
| | | | | PM | 24.0 | C | 381.2 | 25.2 | C | 407.5 | 26.3 | 30.7 | C | 506.2 | 33.3 | C | 544.5 | 38.3 | -- | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard | Signalized | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 0.0 | 36.4 | D | 84.6 | 36.4 | D | 84.6 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 0.0 | 36.1 | D | 70.7 | 36.1 | D | 70.7 | 0.0 | -- | -- | -- | -- |
| | | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 0.0 | 75.5 | E | 459.2 | 75.5 | E | 459.2 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 0.0 | 46.2 | D | 247.2 | 46.2 | D | 247.2 | 0.0 | -- | -- | -- | -- |
| | | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 0.0 | 43.7 | D | 202.8 | 43.7 | D | 202.8 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 0.0 | 42.0 | D | 146.7 | 42.0 | D | 146.7 | 0.0 | -- | -- | -- | -- |
| | | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 222.5 | 17.0 | 29.1 | C | 239.7 | 29.7 | C | 257.2 | 17.5 | -- | -- | -- | -- |
| | | | | PM | 28.6 | C | 219.7 | 29.2 | C | 243.3 | 23.6 | 29.2 | C | 242.5 | 29.9 | C | 266.9 | 24.4 | -- | -- | -- | -- |
| | | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 0.0 | 29.7 | C | 240.6 | 29.7 | C | 240.6 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 0.0 | 35.8 | D | 263.1 | 35.8 | D | 263.1 | 0.0 | -- | -- | -- | -- |
| | | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 0.0 | 107.3 | F | 1293.3 | 107.3 | F | 1293.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 0.0 | 32.4 | C | 447.7 | 32.4 | C | 447.7 | 0.0 | -- | -- | -- | -- |
| | | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 0.0 | 108.4 | F | 1297.9 | 108.4 | F | 1297.9 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 0.0 | 32.4 | C | 445.1 | 32.4 | C | 445.1 | 0.0 | -- | -- | -- | -- |
| | | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 0.0 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 0.0 | 42.1 | D | 32.6 | 42.1 | D | 32.6 | 0.0 | -- | -- | -- | -- |
| | | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 0.0 | 48.8 | D | 286.7 | 48.8 | D | 286.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 0.0 | 285.0 | F | 1338.2 | 285.0 | F | 1338.2 | 0.0 | -- | -- | -- | -- |
| | | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 0.0 | 21.9 | C | 19.9 | 21.9 | C | 19.9 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 0.0 | 23.1 | C | 72.5 | 23.1 | C | 72.5 | 0.0 | -- | -- | -- | -- |

**Table 7 (Continued)**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | | YEAR 2027 FUTURE W/ PROJECT + IMPROVEMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 7 | Universal Hollywood Drive / Hilton Driveway | Unsignalized | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 2.5 | 11.6 | B | 5.0 | 12.6 | B | 10.0 | 5.0 | -- | -- | -- | -- |
| | | | | PM | 8.1 | A | 2.5 | 8.6 | A | 5.0 | 2.5 | 9.4 | A | 5.0 | 10.1 | B | 10.0 | 5.0 | -- | -- | -- | -- |
| | | | EB Left | AM | 13.7 | B | 10.0 | 15.7 | C | 25.0 | 15.0 | 24.9 | C | 27.5 | 34.4 | D | 62.5 | 35.0 | -- | -- | -- | -- |
| | | | | PM | 11.4 | B | 5.0 | 13.6 | B | 22.5 | 17.5 | 16.0 | C | 12.5 | 22.0 | C | 42.5 | 30.0 | -- | -- | -- | -- |
| | | | EB Right | AM | 10.5 | B | 2.5 | 11.2 | B | 7.5 | 5.0 | 13.5 | B | 5.0 | 14.8 | B | 10.0 | 5.0 | -- | -- | -- | -- |
| | | | | PM | 9.4 | A | 2.5 | 10.2 | B | 7.5 | 5.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | 7.5 | -- | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive | Signalized | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 2.9 | 19.7 | B | 22.0 | 19.8 | B | 25.0 | 3.0 | 19.8 | B | 25.0 | 3.0 |
| | | | | PM | 23.4 | C | 5.9 | 23.8 | C | 10.2 | 4.3 | 28.4 | C | 7.9 | 29.4 | C | 13.1 | 5.2 | 29.4 | C | 13.1 | 5.2 |
| | | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 0.0 | 18.8 | B | 107.2 | 18.8 | B | 107.2 | 0.0 | 18.8 | B | 107.2 | 0.0 |
| | | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 0.0 | 17.1 | B | 22.1 | 17.1 | B | 22.1 | 0.0 | 17.1 | B | 22.1 | 0.0 |
| | | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | -- |
| | | | | PM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | -- |
| | | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 0.0 | 17.7 | B | 61.4 | 17.7 | B | 61.4 | 0.0 | 17.7 | B | 61.4 | 0.0 |
| | | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 0.0 | 22.2 | C | 272.9 | 22.2 | C | 272.9 | 0.0 | 22.2 | C | 272.9 | 0.0 |
| | | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 0.0 | 18.1 | B | 62.3 | 18.1 | B | 62.3 | 0.0 | 18.1 | B | 62.3 | 0.0 |
| | | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 0.0 | 24.2 | C | 276.5 | 24.2 | C | 276.5 | 0.0 | 24.2 | C | 276.5 | 0.0 |
| | | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 0.0 | 34.5 | C | 96.7 | 34.5 | C | 96.7 | 0.0 | 38.2 | D | 144.4 | 47.7 |
| | | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 0.0 | 33.1 | C | 51.7 | 33.1 | C | 51.7 | 0.0 | 46.6 | D | 204.2 | 152.5 |
| | | | EB Right | AM | 34.1 | C | 72.3 | 35.2 | D | 101.2 | 28.9 | 34.3 | C | 78.4 | 35.5 | D | 107.7 | 29.3 | 34.0 | C | 69.7 | -8.7 |
| | | | | PM | 145.6 | F | 516.2 | 209.8 | F | 701.2 | 185.0 | 176.8 | F | 606.0 | 243.9 | F | 800.1 | 194.1 | 78.4 | E | 319.8 | -286.2 |
| | | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 0.0 | 26.6 | C | 121.1 | 26.6 | C | 121.1 | 0.0 | 26.6 | C | 121.1 | 0.0 |
| | | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 0.0 | 27.9 | C | 172.1 | 27.9 | C | 172.1 | 0.0 | 27.9 | C | 172.1 | 0.0 |
| | | | WB Through | AM | 29.8 | C | 229.7 | 30.8 | C | 248.1 | 18.4 | 31.0 | C | 250.9 | 32.2 | C | 270.2 | 19.3 | 32.2 | C | 270.2 | 19.3 |
| | | | | PM | 25.2 | C | 63.1 | 25.7 | C | 85.1 | 22.0 | 25.3 | C | 68.6 | 25.8 | C | 90.9 | 22.3 | 25.8 | C | 90.9 | 22.3 |
| | | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 0.0 | 44.7 | D | 331.8 | 44.7 | D | 331.8 | 0.0 | 44.7 | D | 331.8 | 0.0 |
| | | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 0.0 | 24.3 | C | 14.8 | 24.3 | C | 14.8 | 0.0 | 24.3 | C | 14.8 | 0.0 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | Signalized | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 0.5 | 5.8 | A | 45.9 | 5.8 | A | 46.2 | 0.3 | 8.5 | A | 61.3 | 15.4 |
| | | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 0.4 | 5.5 | A | 26.4 | 5.5 | A | 26.8 | 0.4 | 8.0 | A | 35.6 | 9.2 |
| | | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 0.5 | 6.1 | A | 45.7 | 6.1 | A | 46.1 | 0.4 | 8.8 | A | 60.7 | 15.0 |
| | | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.6 | 0.4 | 5.7 | A | 26.9 | 5.7 | A | 27.3 | 0.4 | 8.2 | A | 36 | 9.1 |
| | | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 66.6 | 8.2 | 18.5 | B | 79.4 | 18.7 | B | 88.1 | 8.7 | 14.7 | B | 75.5 | -3.9 |
| | | | | PM | 40.6 | D | 303.1 | 49.7 | D | 350.6 | 47.5 | 201.0 | F | 1099.2 | 222.0 | F | 1205.8 | 106.6 | 75.0 | F | 619.7 | -479.5 |
| | | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.0 | 0.2 | A | 0.6 | 0.2 | A | 0.6 | 0.0 | 0.2 | A | 0.6 | 0.0 |
| | | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.1 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.0 | 0.3 | A | 1.8 | 0.0 |

**Table 7 (Continued)**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | | YEAR 2027 FUTURE W/ PROJECT + IMPROVEMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West | Signalized | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 56.1 | 5.7 | 21.3 | C | 65.4 | 21.3 | C | 71.3 | 5.9 | -- | -- | -- | -- |
| | | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.1 | 9.4 | 24.5 | C | 245.0 | 24.7 | C | 253.1 | 8.1 | -- | -- | -- | -- |
| | | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 0.0 | 11.4 | B | 46.3 | 11.4 | B | 46.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 0.0 | 12.2 | B | 97.3 | 12.2 | B | 97.3 | 0.0 | -- | -- | -- | -- |
| | | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 0.0 | 54.3 | D | 264.7 | 54.3 | D | 264.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 0.0 | 44.4 | D | 78.7 | 44.4 | D | 78.7 | 0.0 | -- | -- | -- | -- |
| | | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 0.0 | 54.4 | F | 993.7 | 54.4 | F | 993.7 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 0.0 | 24.7 | C | 462.5 | 24.7 | C | 462.5 | 0.0 | -- | -- | -- | -- |
| | | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 0.0 | 36.1 | D | 231.9 | 36.1 | D | 231.9 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 0.0 | 42.8 | D | 392.0 | 42.8 | D | 392.0 | 0.0 | -- | -- | -- | -- |
| | | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 1.6 | 6.3 | A | 77.3 | 6.3 | A | 79.3 | 2.0 | -- | -- | -- | -- |
| | | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.3 | 2.3 | 6.5 | A | 91.9 | 6.5 | A | 94.2 | 2.3 | -- | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East | Signalized | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 240.1 | 3.5 | 19.4 | B | 263.3 | 19.5 | B | 266.9 | 3.6 | -- | -- | -- | -- |
| | | | | PM | 17.7 | B | 201.4 | 17.8 | B | 205.8 | 4.4 | 18.6 | B | 236.3 | 18.7 | B | 241.2 | 4.9 | -- | -- | -- | -- |
| | | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 0.0 | 53.0 | F | 730.0 | 53.0 | F | 730.0 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 0.0 | 32.3 | C | 538.1 | 32.3 | C | 538.1 | 0.0 | -- | -- | -- | -- |
| | | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 131.0 | 10.3 | 18.7 | B | 171.2 | 19.1 | B | 182.8 | 11.6 | -- | -- | -- | -- |
| | | | | PM | 17.2 | B | 122.0 | 17.7 | B | 136.1 | 14.1 | 16.9 | B | 109.8 | 17.3 | B | 123.6 | 13.8 | -- | -- | -- | -- |
| | | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 3.6 | 17.0 | B | 187.4 | 17.1 | B | 190.9 | 3.5 | -- | -- | -- | -- |
| | | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 7.1 | 25.0 | C | 412.8 | 25.5 | C | 420.7 | 7.9 | -- | -- | -- | -- |
| | | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 0.0 | 262.7 | F | 2108.3 | 262.7 | F | 2108.3 | 0.0 | -- | -- | -- | -- |
| | | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 0.0 | 278.6 | F | 2227.9 | 278.6 | F | 2227.9 | 0.0 | -- | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* August 2022, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.
[2] Control delay reported in seconds per vehicle.
[3] Signalized Intersection Levels of Service were based on the following criteria:

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

[4] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.
[5] Represents the change in calculated maximum back of queue (in feet) due to the addition of Project-related traffic.

# APPENDIX A

## LADOT ASSESSMENT LETTER FOR THE 2020 APPROVED TRANSPORTATION ASSESSMENT

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




o:\0485\dwg\f2-2.dwg 10/28/2020 16:36:46 jshender llg exhibits color.ctb

NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

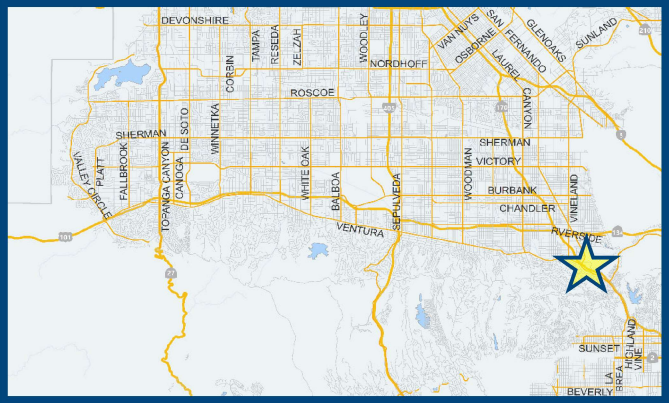
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

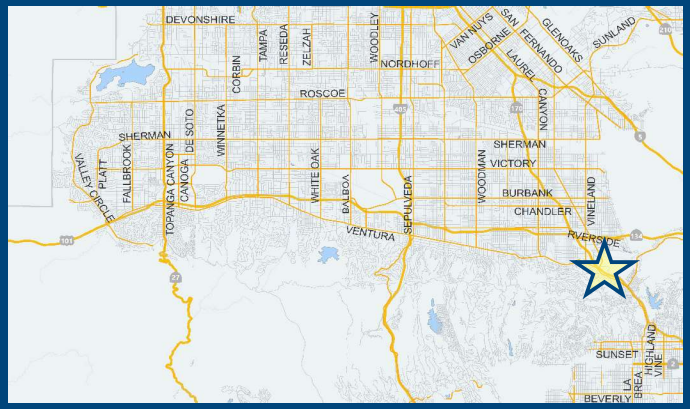
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# ATTACHMENT C
# CEN18-46906_555 E Universal Hollywood Dr

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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

# APPENDIX B

## LADOT VMT CALCULATOR OUTPUT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

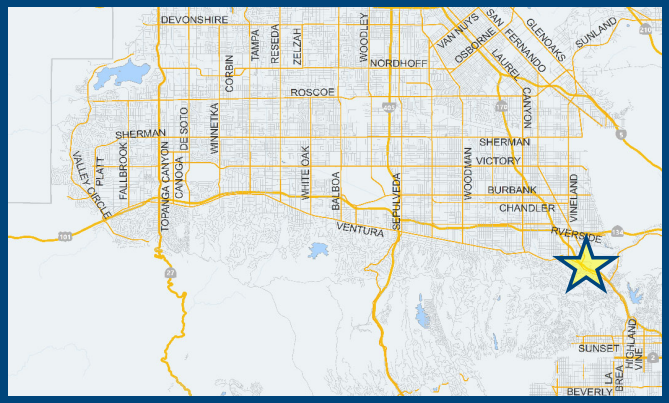
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Quality Restaurant | 5.95 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,421 Daily Vehicle Trips |
| 0 Daily VMT | 30,688 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,421 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 30,688 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 21.570 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

8/3/2022

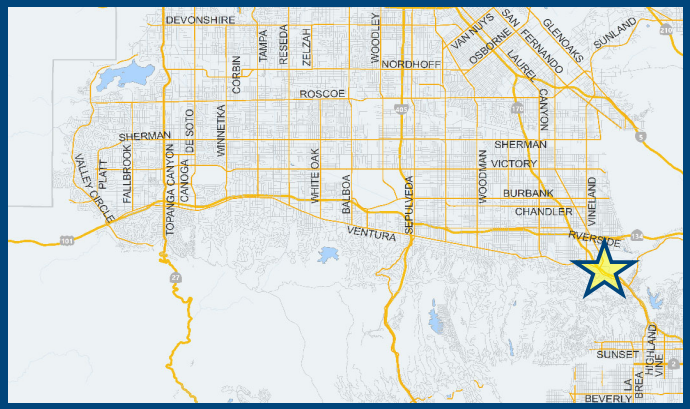
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **3,885** Daily Vehicle Trips | **3,885** Daily Vehicle Trips |
| **26,970** Daily VMT | **26,970** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **8.7** Work VMT per Employee | **8.7** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

8/3/2022

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 9.570 | ksf |
| | High-Turnover Sit-Down Restaurant | 6.050 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 5.950 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 255<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **3,885** | **Daily Vehicle Trips** | **3,885** | **Daily Vehicle Trips** |
| **26,970** | **Daily VMT** | **26,970** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **8.7** | **Work VMT per Employee** | **8.7** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| Transit | *Reduce transit headways* | *Reduction in headways (increase in frequency) (%)* | *0%* | *0%* |
| | | *Existing transit mode share (as a percent of total daily trips) (%)* | *0%* | *0%* |
| | | *Lines within project site improved (<50%, >=50%)* | *0* | *0* |
| | *Implement neighborhood shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees and residents eligible (%)* | *0%* | *0%* |
| | Transit subsidies | Employees and residents eligible (%) | 100% | 100% |
| | | Amount of transit subsidy per passenger (daily equivalent) ($) | $1.49 | $1.49 |
| Education & Encouragement | *Voluntary travel behavior change program* | *Employees and residents participating (%)* | *0%* | *0%* |
| | Promotions and marketing | Employees and residents participating (%) | 100% | 100% |

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Parking** | Reduce parking supply | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Parking sections 1 - 5 |
| | Unbundle parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Parking cash-out | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Price workplace parking | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Residential area parking permits | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | |
| **Transit** | Reduce transit headways | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Transit sections 1 - 3 |
| | Implement neighborhood shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Transit subsidies | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | |
| **Education & Encouragement** | Voluntary travel behavior change program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Education & Encouragement sections 1 - 2 |
| | Promotions and marketing | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 0% | |
| **Commute Trip Reductions** | Required commute trip reduction program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4 |
| | Alternative Work Schedules and Telecommute Program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Employer sponsored vanpool or shuttle | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| | Ride-share program | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| **Shared Mobility** | Car-share | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | TDM Strategy Appendix, Shared Mobility sections 1 - 3 |
| | 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% | |
| | 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**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Bicycle Infrastructure** | Implement/ Improve on-street bicycle facility | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3 |
| | Include Bike parking per LAMC | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | Include secure bike parking and showers | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| **Neighborhood Enhancement** | Traffic calming improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2 |
| | Pedestrian network improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | |

## Final Combined & Maximum TDM Effect

| | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated |
| **COMBINED TOTAL** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *8%* |
| **MAX. TDM EFFECT** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* |

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 652 | -1.5% | 642 | 8.6 | 5,607 | 5,521 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,173 | -11.0% | 2,824 | 6.4 | 20,307 | 18,074 |
| Non-Home Based Other Attraction | 652 | -1.5% | 642 | 7.1 | 4,629 | 4,558 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Home Based Other Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Non-Home Based Other Production | -12.1% | 564 | 4,852 | -12.1% | 564 | 4,852 |
| Home-Based Work Attraction | -12.1% | 275 | 2,228 | -12.1% | 275 | 2,228 |
| Home-Based Other Attraction | -12.1% | 2,482 | 15,884 | -12.1% | 2,482 | 15,884 |
| Non-Home Based Other Attraction | -12.1% | 564 | 4,006 | -12.1% | 564 | 4,006 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 255
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,228** | **2,228** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **8.7** | **8.7** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| | |
|---|---|
| You, the User | |
| By: |  |
| Print Name: | Jason Shender, AICP |
| Title: | Transportation Planner III |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 600 South Lake Avenue, Suite 500<br>Pasadena, CA 91106 |
| Phone: | (626) 796-2322 |
| Email Address: | jshender@llgengineers.com |
| Date: | 8/15/2022 |

# APPENDIX C

## LADOT VMT CALCULATOR OUTPUT (NO TDM)

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

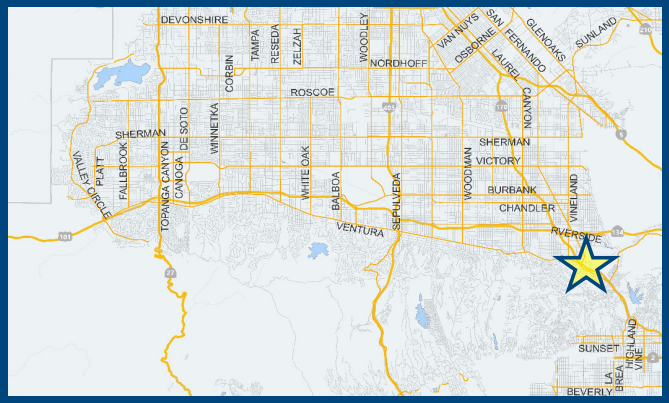
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Quality Restaurant | 5.95 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,421 Daily Vehicle Trips |
| 0 Daily VMT | 30,688 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,421 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 30,688 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 21.570 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

8/3/2022

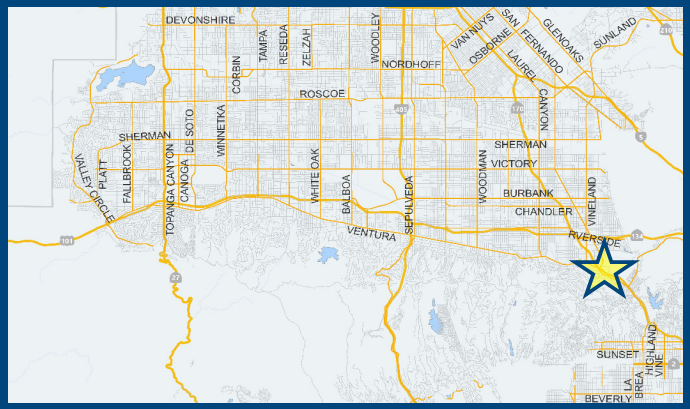
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,421** Daily Vehicle Trips | **4,421** Daily Vehicle Trips |
| **30,688** Daily VMT | **30,688** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

8/3/2022

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 9.570 | ksf |
| | High-Turnover Sit-Down Restaurant | 6.050 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 5.950 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

## Analysis Results

Total Employees: 255
Total Population: 0

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **4,421** | **Daily Vehicle Trips** | **4,421** | **Daily Vehicle Trips** |
| **30,688** | **Daily VMT** | **30,688** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

## Significant VMT Impact?

### APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 652 | -1.5% | 642 | 8.6 | 5,607 | 5,521 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,173 | -11.0% | 2,824 | 6.4 | 20,307 | 18,074 |
| Non-Home Based Other Attraction | 652 | -1.5% | 642 | 7.1 | 4,629 | 4,558 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 642 | 5,521 | 0.0% | 642 | 5,521 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,824 | 18,074 | 0.0% | 2,824 | 18,074 |
| Non-Home Based Other Attraction | 0.0% | 642 | 4,558 | 0.0% | 642 | 4,558 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 255
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| You, the User | |
|---|---|
| By: |  |
| Print Name: | Jason Shender, AICP |
| Title: | Transportation Planner III |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 600 South Lake Avenue, Suite 500<br>Pasadena, CA 91106 |
| Phone: | (626) 796-2322 |
| Email Address: | jshender@llgengineers.com |
| Date: | 8/15/2022 |

# APPENDIX D

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

## LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2010, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for Signalized Intersections

| Level of Service | Control Delay (Sec/Veh) |
|---|---|
| A | $\leq 10$ |
| B | $> 10$ and $\leq 20$ |
| C | $> 20$ and $\leq 35$ |
| D | $> 35$ and $\leq 55$ |
| E | $> 55$ and $\leq 80$ |
| F | $> 80$ |

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

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

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

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

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

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

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

## LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2010, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for TWSC/AWSC Intersections

| Level of Service | Average Control Delay (Sec/Veh) |
|---|---|
| A | $\leq 10$ |
| B | $> 10$ and $\leq 15$ |
| C | $> 15$ and $\leq 25$ |
| D | $> 25$ and $\leq 35$ |
| E | $> 35$ and $\leq 50$ |
| F | $> 50$ |

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

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

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

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

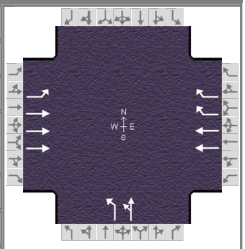
**LOS D** describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

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

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

# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 618 | | | 110 | 115 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.6 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.27 | | | | | 0.00 | | |

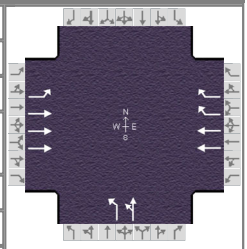
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 694 | | | 124 | 129 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.240 | | | 0.095 | 0.126 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 117.2 | | | 44.7 | 47.6 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.7 | | | 1.8 | 1.9 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.5 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.7 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.7 | B | | 21.5 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.7 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.92 | A | 0.70 | A | 1.40 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 3, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 632 | | | 110 | 133 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.7 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.28 | | | | | 0.00 | | |

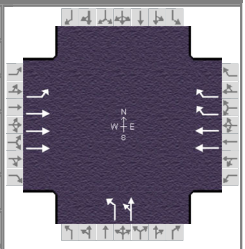
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 710 | | | 124 | 149 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 7.0 | | | 2.3 | 3.5 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 7.0 | | | 2.3 | 3.5 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.245 | | | 0.095 | 0.146 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 120.2 | | | 44.7 | 55.5 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.8 | | | 1.8 | 2.2 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.6 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.9 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.6 | B | | 21.7 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.6 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.93 | A | 0.71 | A | 1.40 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 786 | | | 119 | 218 | 517 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.7 | | | | | 19.8 | | |
| Green Extension Time ( $g_e$ ), s | 3.2 | 0.0 | | 0.0 | | 1.1 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.44 | | | | | 0.00 | | |

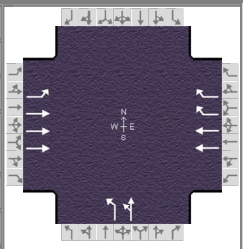
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 115 | 883 | | | 134 | 245 | 389 | 211 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.7 | 9.1 | | | 2.5 | 6.0 | 17.8 | 8.5 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.7 | 9.1 | | | 2.5 | 6.0 | 17.8 | 8.5 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.396 | 0.305 | | | 0.103 | 0.239 | 0.615 | 0.331 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 116.9 | 155.6 | | | 48.4 | 94.6 | 304.2 | 161.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.7 | 6.2 | | | 1.9 | 3.8 | 12.2 | 6.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.7 | 11.7 | | | 21.3 | 22.4 | 26.9 | 23.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.9 | 0.3 | | | 0.2 | 0.5 | 1.3 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.5 | 11.9 | | | 21.4 | 23.0 | 28.2 | 24.0 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 15.0 | B | | 22.4 | C | | 26.7 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 20.0 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.04 | A | 0.80 | A | 1.48 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 3, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 800 | | | 119 | 236 | 517 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.7 | | | | | 19.8 | | |
| Green Extension Time ( $g_e$ ), s | 3.2 | 0.0 | | 0.0 | | 1.1 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.45 | | | | | 0.00 | | |

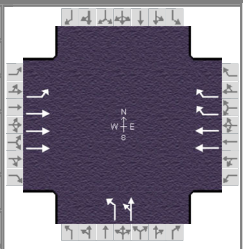
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 115 | 899 | | | 134 | 265 | 389 | 211 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.7 | 9.2 | | | 2.5 | 6.6 | 17.8 | 8.5 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.7 | 9.2 | | | 2.5 | 6.6 | 17.8 | 8.5 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.396 | 0.310 | | | 0.103 | 0.258 | 0.615 | 0.331 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 116.9 | 159.2 | | | 48.4 | 103.2 | 304.2 | 161.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.7 | 6.4 | | | 1.9 | 4.1 | 12.2 | 6.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.7 | 11.7 | | | 21.3 | 22.6 | 26.9 | 23.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.9 | 0.3 | | | 0.2 | 0.6 | 1.3 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.5 | 12.0 | | | 21.4 | 23.2 | 28.2 | 24.0 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 15.0 | B | | 22.6 | C | | 26.7 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 20.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.05 | A | 0.82 | A | 1.48 | A | | |

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# HCS7 Signalized Intersection Results Summary

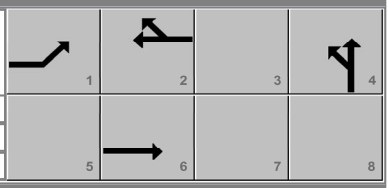
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 208 | | | 283 | 834 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

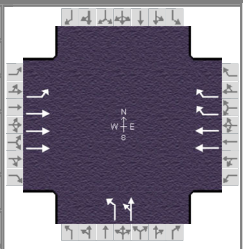
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 217 | | | 295 | 869 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.075 | | | 0.226 | 0.847 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 33 | | | 112.4 | 400.5 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.3 | | | 4.5 | 16.0 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.5 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 8.6 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 38.1 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 79.1 | E | | 34.2 | C | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.78 | A | 1.45 | A | 1.06 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 3, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 227 | | | 283 | 859 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

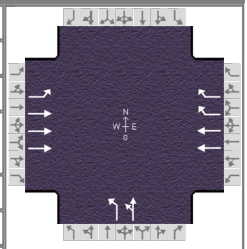
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 236 | | | 295 | 895 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.1 | | | 5.7 | 29.3 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.1 | | | 5.7 | 29.3 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.082 | | | 0.226 | 0.872 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 36.1 | | | 112.4 | 420.1 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.4 | | | 4.5 | 16.8 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.9 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 10.2 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 40.0 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 76.7 | E | | 35.7 | D | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.79 | A | 1.47 | A | 1.06 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 3, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 344 | 267 | | | 438 | 1051 | 344 | 31 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.9 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

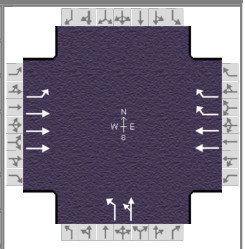
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 358 | 278 | | | 456 | 1095 | 240 | 151 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.5 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.5 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.238 | 0.096 | | | 0.350 | 1.067 | 0.379 | 0.235 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 680.5 | 42.9 | | | 183.4 | 680.1 | 187.2 | 110.8 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 27.2 | 1.7 | | | 7.3 | 27.2 | 7.5 | 4.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.2 | | | 23.4 | 32.0 | 24.4 | 23.0 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 133.0 | 0.1 | | | 0.7 | 47.8 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 175.0 | 10.3 | | | 24.2 | 79.8 | 24.5 | 23.1 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 103.0 | F | | 63.4 | E | | 24.0 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 67.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.84 | A | 1.77 | B | 1.13 | A | | |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 3, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 344 | 286 | | | 438 | 1076 | 344 | 31 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.9 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

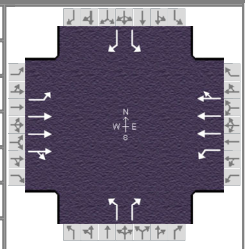
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 358 | 298 | | | 456 | 1121 | 240 | 151 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.7 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.7 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.238 | 0.103 | | | 0.350 | 1.092 | 0.379 | 0.235 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 680.5 | 46.2 | | | 183.4 | 730.5 | 187.2 | 110.8 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 27.2 | 1.8 | | | 7.3 | 29.2 | 7.5 | 4.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.3 | | | 23.4 | 32.0 | 24.4 | 23.0 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 133.0 | 0.1 | | | 0.7 | 56.8 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 175.0 | 10.3 | | | 24.2 | 88.8 | 24.5 | 23.1 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 100.2 | F | | 70.1 | E | | 24.0 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 70.8 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.85 | A | 1.79 | B | 1.13 | A | | |

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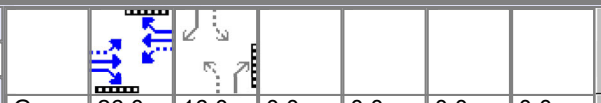
# HCS7 Signalized Intersection Results Summary

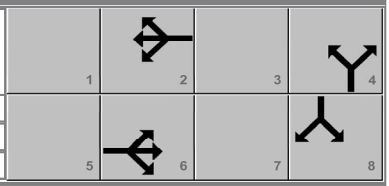
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 559 | 11 | 5 | 196 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

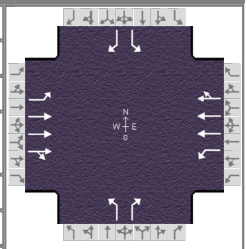
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 465 | 231 | 6 | 163 | 81 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1154 | 1900 | 1880 | 761 | 1900 | 1880 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.5 | 3.3 | 3.4 | 0.2 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | 3.3 | 3.4 | 3.6 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 719 | 1976 | 978 | 489 | 1976 | 977 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.093 | 0.235 | 0.236 | 0.012 | 0.082 | 0.083 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.1 | 51.1 | 54.2 | 1.6 | 16.3 | 17.2 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.0 | 2.2 | 0.1 | 0.7 | 0.7 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.5 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 6.9 | 6.8 | 7.1 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.91 | A | 0.63 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

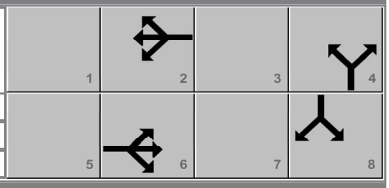
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 573 | 11 | 5 | 214 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

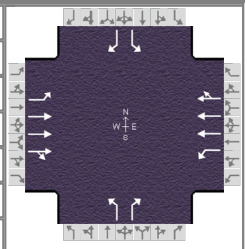
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 476 | 236 | 6 | 177 | 88 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1131 | 1900 | 1881 | 749 | 1900 | 1881 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.6 | 3.4 | 3.4 | 0.2 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.8 | 3.4 | 3.4 | 3.7 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 705 | 1976 | 978 | 482 | 1976 | 978 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.095 | 0.241 | 0.242 | 0.013 | 0.090 | 0.090 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.2 | 52.4 | 55.6 | 1.7 | 17.9 | 18.9 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.1 | 2.2 | 0.1 | 0.7 | 0.8 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.6 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.0 | 6.9 | 7.2 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.0 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.92 | A | 0.64 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

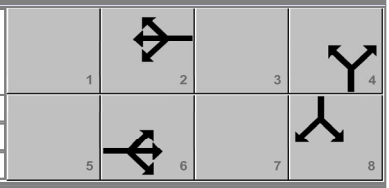
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 59 | 722 | 12 | 5 | 306 | 4 | 10 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

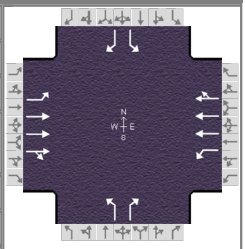
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 72 | 598 | 297 | 6 | 252 | 126 | 12 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1021 | 1900 | 1883 | 632 | 1900 | 1887 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 4.5 | 4.5 | 0.3 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.7 | 4.5 | 4.5 | 4.8 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 640 | 1976 | 979 | 416 | 1976 | 981 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.112 | 0.303 | 0.303 | 0.015 | 0.128 | 0.128 | 0.017 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18.5 | 68.4 | 72.9 | 1.8 | 25.9 | 27.5 | 3.8 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.7 | 2.9 | 0.1 | 1.0 | 1.1 | 0.2 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 7.1 | 6.8 | 6.8 | 8.2 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.4 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.5 | 7.2 | 7.6 | 8.3 | 6.3 | 6.4 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.4 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.4 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.02 | A | 0.70 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

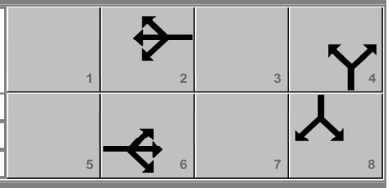
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 59 | 736 | 12 | 5 | 324 | 4 | 10 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1 | 2 | 3 | 4 |
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

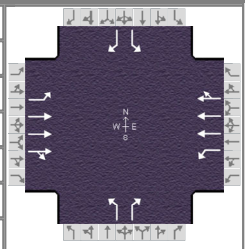
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 72 | 610 | 303 | 6 | 267 | 133 | 12 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1000 | 1900 | 1884 | 622 | 1900 | 1888 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 4.6 | 4.6 | 0.3 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 4.6 | 4.6 | 4.9 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 628 | 1976 | 979 | 410 | 1976 | 982 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.115 | 0.309 | 0.309 | 0.015 | 0.135 | 0.136 | 0.017 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18.6 | 70.2 | 74.7 | 1.8 | 27.4 | 29.1 | 3.8 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.8 | 3.0 | 0.1 | 1.1 | 1.2 | 0.2 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 7.2 | 6.9 | 6.9 | 8.3 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.4 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.6 | 7.3 | 7.7 | 8.3 | 6.3 | 6.5 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.4 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.4 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.03 | A | 0.71 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

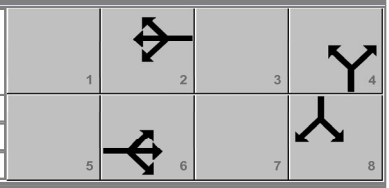
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 161 | 12 | 4 | 959 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1 | 2 | 3 | 4 |
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

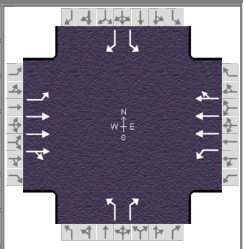
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 126 | 62 | 4 | 696 | 348 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 549 | 1900 | 1831 | 1214 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 0.8 | 0.8 | 0.1 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.4 | 0.8 | 0.8 | 0.9 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 371 | 1976 | 952 | 755 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.094 | 0.064 | 0.065 | 0.006 | 0.352 | 0.352 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.5 | 12.4 | 13.2 | 1 | 82.6 | 88.7 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.5 | 0.5 | 0.0 | 3.3 | 3.5 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.2 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.7 | 6.0 | 6.1 | 6.2 | 7.5 | 8.0 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.7 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.61 | A | 1.06 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

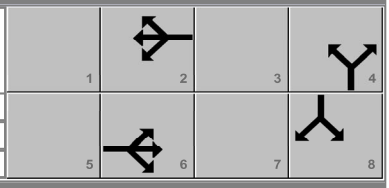
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 180 | 12 | 4 | 984 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

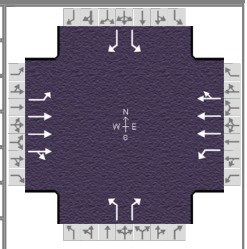
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 140 | 69 | 4 | 714 | 357 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 535 | 1900 | 1838 | 1192 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.1 | 0.9 | 0.9 | 0.1 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.6 | 0.9 | 0.9 | 1.0 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 363 | 1976 | 956 | 741 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.096 | 0.071 | 0.072 | 0.006 | 0.361 | 0.361 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.6 | 13.8 | 14.6 | 1 | 85.3 | 91.6 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.6 | 0.6 | 0.0 | 3.4 | 3.7 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.3 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.9 | 6.0 | 6.1 | 6.3 | 7.6 | 8.1 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.8 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.3 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.62 | A | 1.08 | A | | F | | F |

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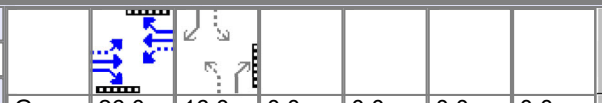
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 217 | 13 | 4 | 1320 | 1 | 12 | | 4 | 20 | | 166 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.3 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

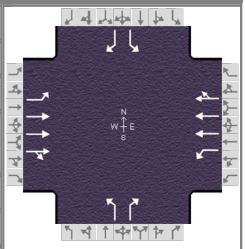
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 167 | 83 | 4 | 957 | 478 | 13 | | 4 | 22 | | 180 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 378 | 1900 | 1843 | 1148 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.5 | 1.1 | 1.1 | 0.1 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.6 | 1.1 | 1.1 | 1.2 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 279 | 1976 | 959 | 715 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.132 | 0.085 | 0.086 | 0.006 | 0.485 | 0.484 | 0.018 | | 0.008 | 0.030 | | 0.350 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 14.9 | 16.7 | 17.7 | 1 | 125.4 | 135.8 | 4 | | 1.3 | 6.8 | | 62.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.7 | 0.0 | 5.0 | 5.4 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.4 | 6.0 | 6.0 | 6.3 | 7.7 | 7.7 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 1.0 | 0.1 | 0.2 | 0.0 | 0.9 | 1.7 | 0.0 | | 0.0 | 0.0 | | 0.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.4 | 6.1 | 6.2 | 6.4 | 8.6 | 9.4 | 11.6 | | 11.6 | 11.7 | | 13.2 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.8 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.65 | A | 1.28 | A | | F | | F |

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# HCS7 Signalized Intersection Results Summary

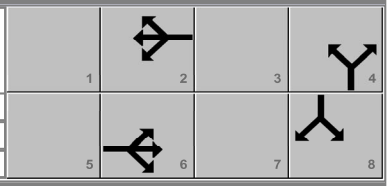
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 236 | 13 | 4 | 1345 | 1 | 12 | | 4 | 20 | | 166 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.3 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

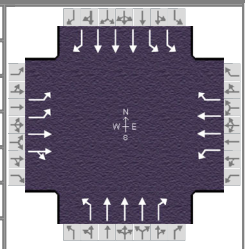
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 181 | 90 | 4 | 975 | 488 | 13 | | 4 | 22 | | 180 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 368 | 1900 | 1848 | 1126 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.6 | 1.2 | 1.2 | 0.1 | 8.3 | 8.3 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.9 | 1.2 | 1.2 | 1.3 | 8.3 | 8.3 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 274 | 1976 | 961 | 702 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.135 | 0.092 | 0.093 | 0.006 | 0.494 | 0.494 | 0.018 | | 0.008 | 0.030 | | 0.350 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 15.1 | 18.2 | 19.2 | 1 | 128.6 | 139.4 | 4 | | 1.3 | 6.8 | | 62.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.8 | 0.0 | 5.1 | 5.6 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.6 | 6.0 | 6.1 | 6.4 | 7.7 | 7.7 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 1.0 | 0.1 | 0.2 | 0.0 | 0.9 | 1.8 | 0.0 | | 0.0 | 0.0 | | 0.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.6 | 6.1 | 6.2 | 6.4 | 8.6 | 9.5 | 11.6 | | 11.6 | 11.7 | | 13.2 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.9 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.66 | A | 1.29 | A | | F | | F |

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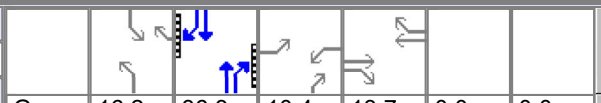
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

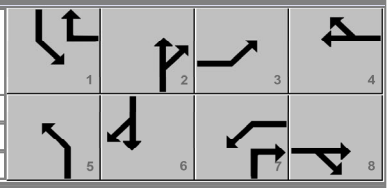


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 336 | 22 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.1 | 4.5 | 6.9 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.00 | 0.14 | 0.00 | | 1.00 | |

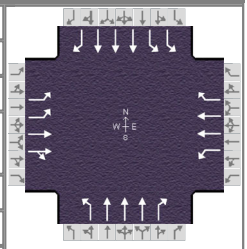
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 180 | 178 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1859 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.692 | 0.698 | 0.244 | 0.131 | 0.220 | 0.158 | 0.651 | 0.364 | 1.335 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 206.6 | 205.6 | 50.5 | 31.9 | 86.1 | 43.2 | 318.8 | 186.6 | 763.3 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.3 | 8.2 | 2.0 | 1.3 | 3.4 | 1.7 | 12.8 | 7.5 | 30.5 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.1 | 41.2 | 40.6 | 37.9 | 26.3 | 36.1 | 26.6 | 16.7 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.4 | 6.9 | 0.2 | 0.0 | 0.1 | 0.1 | 1.8 | 1.3 | 162.4 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 47.6 | 48.1 | 40.8 | 38.0 | 26.4 | 36.2 | 28.3 | 18.1 | 204.3 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 47.3 | D | | 33.0 | C | | 26.7 | C | | 88.4 | F | |
| Intersection Delay, s/veh / LOS | 59.8 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.98 | A | 0.67 | A | 1.34 | A | 1.73 | B |

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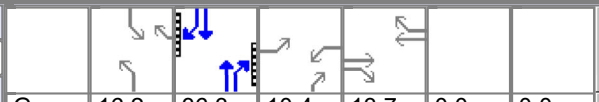
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

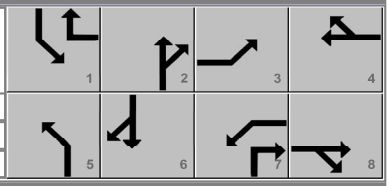


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 350 | 22 | 56 | 83 | 124 | 46 | 1223 | 311 | 784 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.5 | 4.8 | 7.8 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.01 | 0.25 | 0.00 | | 1.00 | |

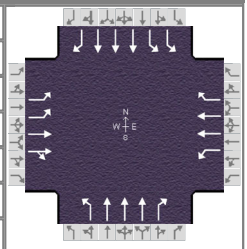
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 187 | 185 | 56 | 83 | 124 | 46 | 1223 | 311 | 784 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1860 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.4 | 9.5 | 2.8 | 2.0 | 5.8 | 2.2 | 19.7 | 12.6 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.4 | 9.5 | 2.8 | 2.0 | 5.8 | 2.2 | 19.7 | 12.6 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.719 | 0.725 | 0.279 | 0.167 | 0.258 | 0.158 | 0.651 | 0.407 | 1.377 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 216.8 | 215.9 | 58 | 40.9 | 102.2 | 43.2 | 318.8 | 208.9 | 820.2 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.7 | 8.6 | 2.3 | 1.6 | 4.1 | 1.7 | 12.8 | 8.4 | 32.8 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.3 | 41.3 | 40.8 | 38.1 | 26.6 | 36.1 | 26.6 | 17.1 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 8.1 | 8.6 | 0.3 | 0.1 | 0.1 | 0.1 | 1.8 | 1.6 | 180.6 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 49.4 | 50.0 | 41.1 | 38.2 | 26.7 | 36.2 | 28.3 | 18.8 | 222.5 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 48.4 | D | | 33.4 | C | | 26.7 | C | | 95.8 | F | |
| Intersection Delay, s/veh / LOS | 63.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 0.70 | A | 1.36 | A | 1.74 | B |

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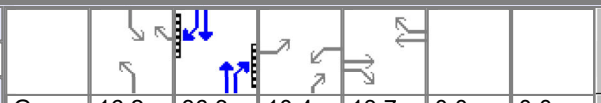
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

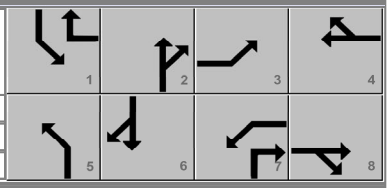


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 302 | 440 | 24 | 185 | 137 | 217 | 51 | 1458 | 563 | 991 | 1508 | 157 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.4 | 14.2 | 12.1 | 12.9 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

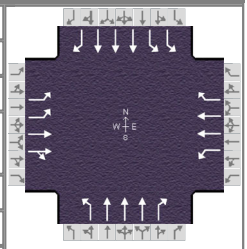
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 302 | 234 | 230 | 185 | 137 | 217 | 51 | 1458 | 563 | 991 | 1508 | 157 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1865 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.4 | 12.1 | 12.2 | 10.1 | 3.4 | 10.9 | 2.4 | 25.0 | 28.3 | 16.2 | 26.2 | 6.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.4 | 12.1 | 12.2 | 10.1 | 3.4 | 10.9 | 2.4 | 25.0 | 28.3 | 16.2 | 26.2 | 6.9 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.826 | 0.897 | 0.902 | 0.921 | 0.276 | 0.451 | 0.175 | 0.776 | 0.738 | 1.741 | 0.803 | 0.269 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 194.8 | 310.3 | 309.8 | 278.3 | 68.6 | 190.6 | 48.1 | 392.7 | 419.7 | 1324.6 | 410.5 | 8.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.8 | 12.4 | 12.4 | 11.1 | 2.7 | 7.6 | 1.9 | 15.7 | 16.8 | 53.0 | 16.4 | 0.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.9 | 42.5 | 42.5 | 44.0 | 38.7 | 28.4 | 36.2 | 28.2 | 21.3 | 41.9 | 28.6 | 22.5 |
| Incremental Delay ( $d_2$ ), s/veh | 13.6 | 29.8 | 31.1 | 41.3 | 0.1 | 0.2 | 0.1 | 3.2 | 6.3 | 340.6 | 3.7 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 57.5 | 72.3 | 73.6 | 85.3 | 38.8 | 28.6 | 36.3 | 31.5 | 27.6 | 382.5 | 32.4 | 23.6 |
| Level of Service (LOS) | E | E | E | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 66.8 | E | | 50.7 | D | | 30.5 | C | | 162.5 | F | |
| Intersection Delay, s/veh / LOS | 95.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.12 | A | 0.93 | A | 1.63 | B | 1.95 | B |

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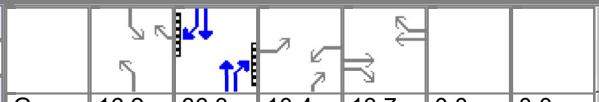
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

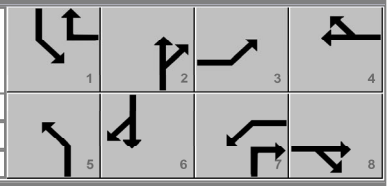


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 302 | 454 | 24 | 192 | 155 | 235 | 51 | 1458 | 596 | 1015 | 1508 | 157 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.4 | 14.6 | 12.6 | 14.0 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

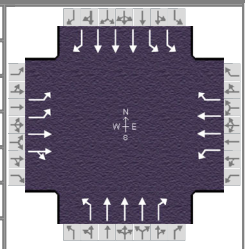
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 302 | 241 | 237 | 192 | 155 | 235 | 51 | 1458 | 596 | 1015 | 1508 | 157 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1866 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.4 | 12.5 | 12.6 | 10.6 | 3.9 | 12.0 | 2.4 | 25.0 | 30.9 | 16.2 | 26.2 | 6.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.4 | 12.5 | 12.6 | 10.6 | 3.9 | 12.0 | 2.4 | 25.0 | 30.9 | 16.2 | 26.2 | 6.9 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.826 | 0.924 | 0.929 | 0.956 | 0.313 | 0.488 | 0.175 | 0.776 | 0.781 | 1.783 | 0.803 | 0.269 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 194.8 | 330.1 | 329.3 | 301.2 | 78 | 205 | 48.1 | 392.7 | 458.3 | 1383.5 | 410.5 | 8.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.8 | 13.2 | 13.2 | 12.0 | 3.1 | 8.2 | 1.9 | 15.7 | 18.3 | 55.3 | 16.4 | 0.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.9 | 42.6 | 42.7 | 44.2 | 38.9 | 28.8 | 36.2 | 28.2 | 22.0 | 41.9 | 28.6 | 22.5 |
| Incremental Delay ( $d_2$ ), s/veh | 13.6 | 35.6 | 37.0 | 50.4 | 0.1 | 0.3 | 0.1 | 3.2 | 7.8 | 359.4 | 3.7 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 57.5 | 78.2 | 79.6 | 94.6 | 39.0 | 29.1 | 36.3 | 31.5 | 29.8 | 401.3 | 32.4 | 23.6 |
| Level of Service (LOS) | E | E | E | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 70.6 | E | | 53.3 | D | | 31.1 | C | | 171.6 | F | |
| Intersection Delay, s/veh / LOS | 99.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.13 | A | 0.97 | A | 1.65 | B | 1.96 | B |

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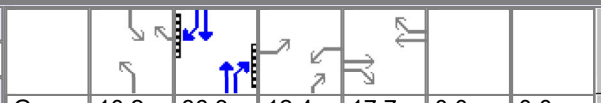
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 12, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

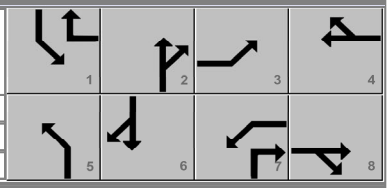


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 37 | 43 | 146 | 393 | 423 | 178 | 1233 | 130 | 150 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( *Y+R c* ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( *g s* ), s | 5.8 | 4.5 | 10.4 | 19.7 | 12.1 | | 6.4 | |
| Green Extension Time ( *g e* ), s | 0.2 | 2.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.04 | 1.00 | 1.00 | 1.00 | | 0.41 | |

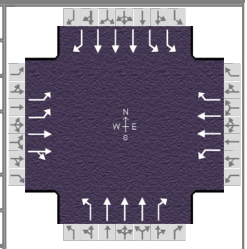
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 40 | 47 | 159 | 427 | 460 | 193 | 1340 | 141 | 163 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1610 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( *g s* ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 285 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.120 | 0.164 | 0.669 | 0.667 | 1.023 | 1.059 | 0.713 | 0.178 | 0.455 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 37.5 | 44.1 | 185.2 | 219.4 | 597.4 | 344.5 | 354.1 | 81 | 84.7 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 1.5 | 1.8 | 7.4 | 8.8 | 23.9 | 13.8 | 14.2 | 3.2 | 3.4 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 40.0 | 34.6 | 34.9 | 41.4 | 38.4 | 36.1 | 45.0 | 27.4 | 14.0 | 42.3 | 25.7 | 29.5 |
| Incremental Delay ( *d 2* ), s/veh | 0.2 | 0.1 | 0.1 | 5.8 | 2.2 | 48.6 | 82.9 | 2.3 | 0.5 | 0.3 | 1.3 | 15.3 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 34.7 | 35.0 | 47.2 | 40.6 | 84.6 | 127.9 | 29.7 | 14.5 | 42.6 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | C | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.2 | D | | 60.9 | E | | 39.8 | D | | 33.6 | C | |
| Intersection Delay, s/veh / LOS | 42.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.68 | A | 1.35 | A | 1.41 | A | 1.46 | A |

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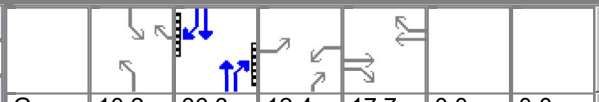
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

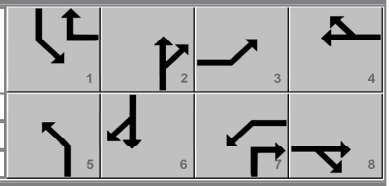


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 56 | 43 | 156 | 418 | 448 | 178 | 1233 | 175 | 182 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | 4.7 | 11.0 | 19.7 | 12.1 | | 7.4 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 2.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.06 | 1.00 | 1.00 | 1.00 | | 1.00 | |

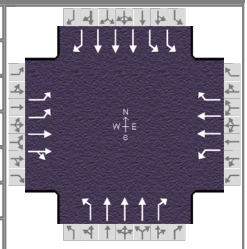
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 55 | 53 | 170 | 454 | 487 | 193 | 1340 | 190 | 198 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1639 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.8 | 2.4 | 2.7 | 9.0 | 11.8 | 17.7 | 10.1 | 22.3 | 6.8 | 5.4 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 2.4 | 2.7 | 9.0 | 11.8 | 17.7 | 10.1 | 22.3 | 6.8 | 5.4 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 290 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.163 | 0.182 | 0.715 | 0.710 | 1.084 | 1.059 | 0.713 | 0.239 | 0.552 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 51.5 | 50.1 | 202 | 234.4 | 686.8 | 344.5 | 354.1 | 113.1 | 105.3 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 2.1 | 2.0 | 8.1 | 9.4 | 27.5 | 13.8 | 14.2 | 4.5 | 4.2 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.0 | 34.9 | 35.0 | 41.7 | 38.7 | 36.1 | 45.0 | 27.4 | 14.5 | 42.7 | 25.7 | 29.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 8.5 | 3.1 | 67.0 | 82.9 | 2.3 | 0.7 | 1.1 | 1.3 | 15.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 35.0 | 35.1 | 50.2 | 41.9 | 103.0 | 127.9 | 29.7 | 15.2 | 43.8 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | D | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.0 | D | | 69.9 | E | | 39.1 | D | | 33.9 | C | |
| Intersection Delay, s/veh / LOS | 44.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.70 | A | 1.40 | A | 1.44 | A | 1.48 | A |

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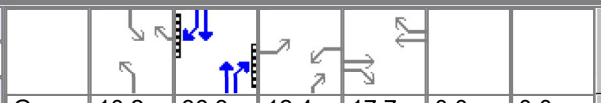
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

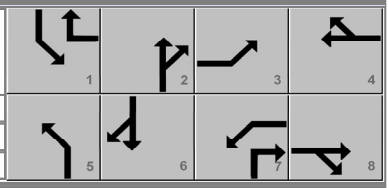


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 160 | 71 | 46 | 293 | 541 | 696 | 191 | 1380 | 301 | 311 | 1218 | 668 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.6 | 5.2 | 15.1 | 19.7 | 12.1 | | 11.6 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.05 | 0.19 | 1.00 | 1.00 | 1.00 | | 1.00 | |

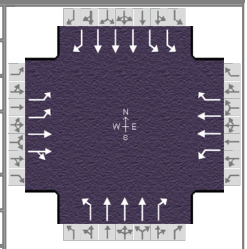
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 174 | 65 | 62 | 318 | 588 | 757 | 208 | 1500 | 327 | 338 | 1324 | 726 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1661 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.6 | 2.9 | 3.2 | 13.1 | 16.0 | 17.7 | 10.1 | 26.0 | 12.9 | 9.6 | 21.9 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.6 | 2.9 | 3.2 | 13.1 | 16.0 | 17.7 | 10.1 | 26.0 | 12.9 | 9.6 | 21.9 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 294 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.399 | 0.192 | 0.213 | 1.344 | 0.918 | 1.684 | 1.136 | 0.798 | 0.411 | 0.943 | 0.705 | 1.242 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.8 | 61.2 | 59.5 | 691.3 | 338.2 | 1909.8 | 395.8 | 407.8 | 211.1 | 240.7 | 349.1 | 1225.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | 2.4 | 2.4 | 27.7 | 13.5 | 76.4 | 15.8 | 16.3 | 8.4 | 9.6 | 14.0 | 49.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.4 | 35.1 | 35.2 | 43.5 | 40.4 | 36.1 | 45.0 | 28.6 | 16.1 | 44.6 | 27.3 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 180.1 | 18.0 | 317.4 | 107.9 | 3.6 | 1.6 | 32.7 | 2.2 | 123.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.6 | 35.2 | 35.3 | 223.5 | 58.5 | 353.4 | 152.8 | 32.2 | 17.6 | 77.3 | 29.5 | 154.9 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | E | C | F |
| Approach Delay, s/veh / LOS | 38.3 | D | | 224.3 | F | | 42.2 | D | | 74.4 | E | |
| Intersection Delay, s/veh / LOS | 101.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.74 | A | 1.86 | B | 1.61 | B | 1.80 | B |

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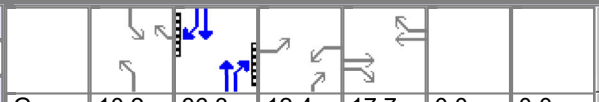
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

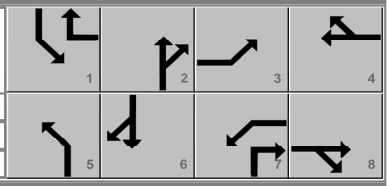


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 160 | 90 | 46 | 303 | 566 | 721 | 191 | 1380 | 346 | 343 | 1218 | 668 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.6 | 5.7 | 15.1 | 19.7 | 12.1 | | 12.2 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.05 | 0.23 | 1.00 | 1.00 | 1.00 | | 1.00 | |

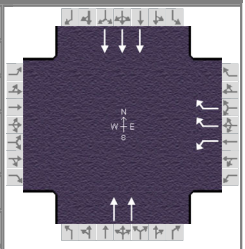
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 174 | 75 | 73 | 329 | 615 | 784 | 208 | 1500 | 376 | 373 | 1324 | 726 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1691 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.6 | 3.4 | 3.7 | 13.1 | 16.9 | 17.7 | 10.1 | 26.0 | 15.4 | 10.2 | 21.9 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.6 | 3.4 | 3.7 | 13.1 | 16.9 | 17.7 | 10.1 | 26.0 | 15.4 | 10.2 | 21.9 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 299 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.399 | 0.224 | 0.243 | 1.389 | 0.961 | 1.745 | 1.136 | 0.798 | 0.473 | 1.040 | 0.705 | 1.242 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.8 | 71.6 | 69.5 | 741.2 | 372.7 | 2041.5 | 395.8 | 407.8 | 244.2 | 296.5 | 349.1 | 1225.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | 2.9 | 2.8 | 29.6 | 14.9 | 81.7 | 15.8 | 16.3 | 9.8 | 11.9 | 14.0 | 49.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.4 | 35.3 | 35.4 | 43.5 | 40.8 | 36.1 | 45.0 | 28.6 | 16.7 | 44.9 | 27.3 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.2 | 199.1 | 25.9 | 344.2 | 107.9 | 3.6 | 2.0 | 58.3 | 2.2 | 123.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.6 | 35.4 | 35.5 | 242.5 | 66.7 | 380.2 | 152.8 | 32.2 | 18.7 | 103.2 | 29.5 | 154.9 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | F | C | F |
| Approach Delay, s/veh / LOS | 38.2 | D | | 242.4 | F | | 41.8 | D | | 78.4 | E | |
| Intersection Delay, s/veh / LOS | 108.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.75 | A | 1.91 | B | 1.63 | B | 1.82 | B |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 772 | | 388 | | | 1857 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.15 | | | | |

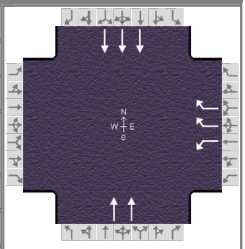
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 813 | | 408 | | | 1955 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.792 | | 0.202 | | | 0.674 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 344.6 | | 97 | | | 375.9 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 13.8 | | 3.9 | | | 15.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.6 | | 10.9 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.0 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 32.6 | | 11.1 | | | 16.8 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.7 | | C | 11.1 | | B | 16.8 | | B |
| Intersection Delay, s/veh / LOS | 20.2 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.82 | A | 1.56 | B |

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# HCS7 Signalized Intersection Results Summary

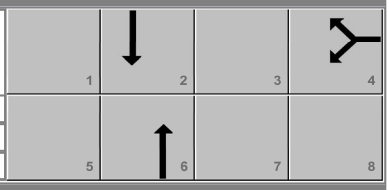
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 786 | | 407 | | | 1864 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.20 | | | | |

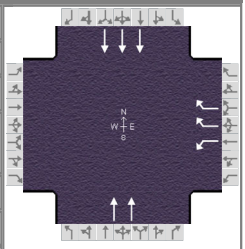
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 827 | | 428 | | | 1962 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 26.2 | | 5.9 | | | 26.9 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 26.2 | | 5.9 | | | 26.9 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.806 | | 0.211 | | | 0.677 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 353.6 | | 102.6 | | | 377.7 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 14.1 | | 4.1 | | | 15.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.9 | | 11.0 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.5 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 33.3 | | 11.2 | | | 16.9 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.4 | | C | 11.2 | | B | 16.9 | | B |
| Intersection Delay, s/veh / LOS | 20.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.84 | A | 1.57 | B |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 75 | | 1165 | | 492 | | | 2153 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 2 | 3 | 4 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

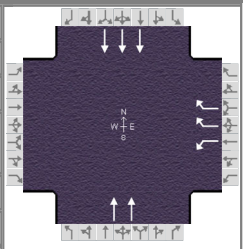
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 79 | | 1226 | | 518 | | | 2266 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.4 | | | 34.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.4 | | | 34.3 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.121 | | 1.195 | | 0.256 | | | 0.782 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 54.7 | | 949 | | 127.5 | | | 467.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 38.0 | | 5.1 | | | 18.7 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.3 | | | 17.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 97.5 | | 0.3 | | | 2.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 129.5 | | 11.6 | | | 19.4 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 123.0 | | F | 11.6 | | B | 19.4 | | B |
| Intersection Delay, s/veh / LOS | 51.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.91 | A | 1.73 | B |

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# HCS7 Signalized Intersection Results Summary

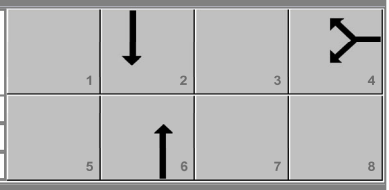
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 75 | | 1179 | | 511 | | | 2160 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

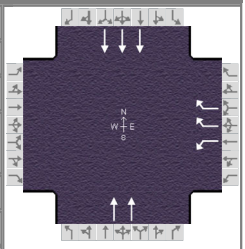
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 79 | | 1241 | | 538 | | | 2274 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.7 | | | 34.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.7 | | | 34.5 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.121 | | 1.210 | | 0.266 | | | 0.784 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 54.7 | | 983.3 | | 133.5 | | | 469.4 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 39.3 | | 5.3 | | | 18.8 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.4 | | | 17.3 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 103.5 | | 0.3 | | | 2.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 135.5 | | 11.7 | | | 19.5 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 128.7 | | F | 11.7 | | B | 19.5 | | B |
| Intersection Delay, s/veh / LOS | 53.4 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.93 | A | 1.74 | B |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 753 | | 787 | | | 1195 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 2.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.19 | | | | |

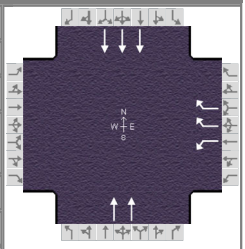
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 818 | | 855 | | | 1299 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.798 | | 0.422 | | | 0.448 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 348.1 | | 226.2 | | | 230 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 13.9 | | 9.0 | | | 9.2 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 28.7 | | 12.7 | | | 12.9 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 4.2 | | 0.6 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 32.9 | | 13.3 | | | 13.4 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.5 | | C | 13.3 | | B | 13.4 | | B |
| Intersection Delay, s/veh / LOS | 18.9 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.19 | A | 1.20 | A |

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# HCS7 Signalized Intersection Results Summary

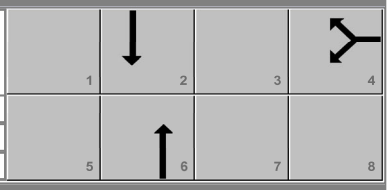
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 772 | | 813 | | | 1205 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.7 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.26 | | | | |

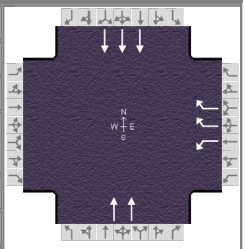
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 839 | | 884 | | | 1310 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 26.7 | | 14.2 | | | 14.9 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 26.7 | | 14.2 | | | 14.9 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.818 | | 0.436 | | | 0.452 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 361.4 | | 234.3 | | | 232.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 14.5 | | 9.4 | | | 9.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 29.0 | | 12.8 | | | 13.0 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 4.9 | | 0.7 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 34.0 | | 13.5 | | | 13.5 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.4 | | C | 13.5 | | B | 13.5 | | B |
| Intersection Delay, s/veh / LOS | 19.3 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.22 | A | 1.21 | A |

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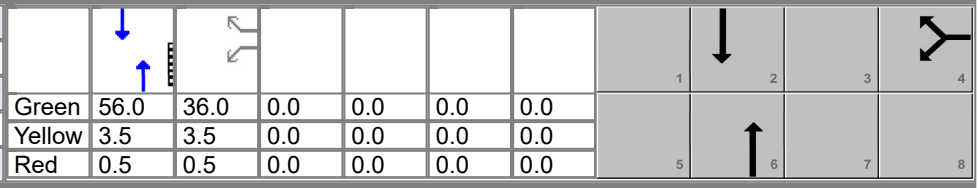
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 2, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 123 | | 939 | | 932 | | | 1553 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 37.7 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

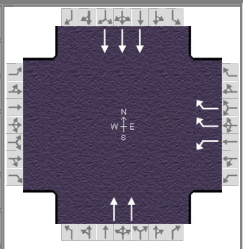
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 134 | | 1021 | | 1013 | | | 1688 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 5.1 | | 35.7 | | 17.1 | | | 21.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 5.1 | | 35.7 | | 17.1 | | | 21.3 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.205 | | 0.995 | | 0.500 | | | 0.582 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 95.7 | | 547.8 | | 272 | | | 310.4 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.8 | | 21.9 | | 10.9 | | | 12.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 31.9 | | 13.4 | | | 14.4 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 26.7 | | 0.9 | | | 0.9 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.2 | | 58.6 | | 14.3 | | | 15.2 | |
| Level of Service (LOS) | | | | C | | E | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 54.4 | | D | 14.3 | | B | 15.2 | | B |
| Intersection Delay, s/veh / LOS | 26.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.32 | A | 1.42 | A |

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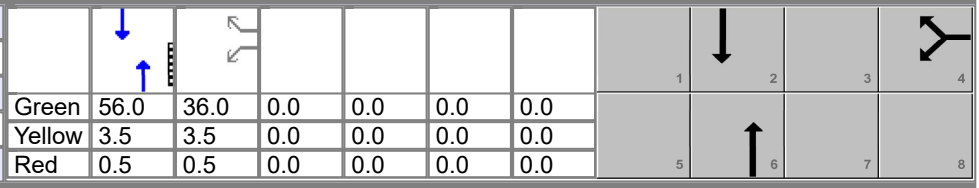
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 4, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 123 | | 958 | | 958 | | | 1563 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

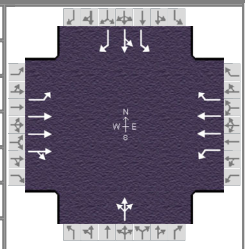
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 134 | | 1041 | | 1041 | | | 1699 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 5.1 | | 36.0 | | 17.8 | | | 21.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 5.1 | | 36.0 | | 17.8 | | | 21.5 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.205 | | 1.015 | | 0.514 | | | 0.586 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 95.7 | | 578.7 | | 280.7 | | | 313.1 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.8 | | 23.1 | | 11.2 | | | 12.5 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 32.0 | | 13.6 | | | 14.4 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 31.9 | | 0.9 | | | 0.9 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.2 | | 63.9 | | 14.5 | | | 15.3 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 59.1 | | E | 14.5 | | B | 15.3 | | B |
| Intersection Delay, s/veh / LOS | 28.2 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.32 | B | 2.32 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.35 | A | 1.42 | A |

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# HCS7 Signalized Intersection Results Summary

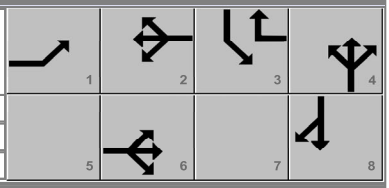
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 201 | 34 | 65 | 54 | 929 | 105 | 1019 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

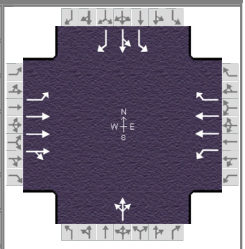
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 205 | | 156 | | 635 | 420 | 1040 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( $g_s$ ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.257 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 122.9 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 4.9 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.6 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.8 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.3 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 22.1 | C | | 36.0 | D | | 82.4 | F | |
| Intersection Delay, s/veh / LOS | 54.8 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.79 | A | 0.75 | A | 3.94 | D |

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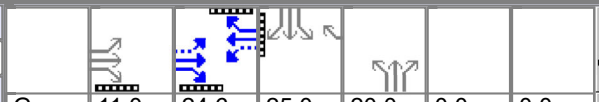
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

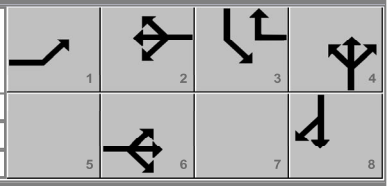


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 220 | 34 | 65 | 54 | 929 | 105 | 1026 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

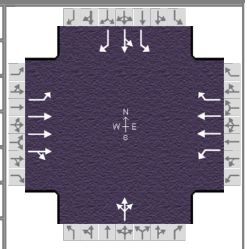
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 224 | | 156 | | 635 | 420 | 1047 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( $g_s$ ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 8.2 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 8.2 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.281 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 136.5 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 5.5 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.8 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.9 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.6 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 21.9 | C | | 36.0 | D | | 82.1 | F | |
| Intersection Delay, s/veh / LOS | 54.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.81 | A | 0.75 | A | 3.96 | D |

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# HCS7 Signalized Intersection Results Summary

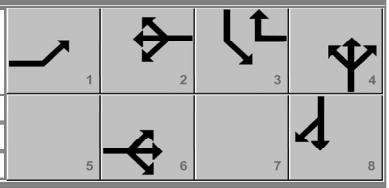
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | 1695 | 13 | 13 | 194 | 263 | 42 | 96 | 60 | 1090 | 117 | 1160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 4.0 | | | | | 12.2 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.04 | | | | | 0.10 | | 1.00 |

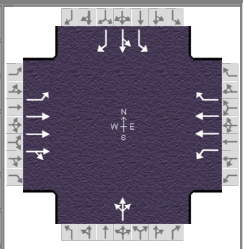
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 57 | 1163 | 579 | 13 | 198 | 268 | | 202 | | 745 | 486 | 1184 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1892 | 281 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( $g_s$ ), s | 2.0 | 26.7 | 26.7 | 4.3 | 4.4 | 10.1 | | 10.2 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.0 | 26.7 | 26.7 | 16.0 | 4.4 | 10.1 | | 10.2 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 515 | 1505 | 749 | 108 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.111 | 0.773 | 0.773 | 0.122 | 0.222 | 0.336 | | 0.566 | | 1.647 | 1.062 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 38.3 | 450.6 | 472.8 | 16.3 | 87.2 | 169 | | 204.9 | | 1875 | 658.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.5 | 18.0 | 18.9 | 0.7 | 3.5 | 6.8 | | 8.2 | | 75.0 | 26.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.3 | 26.3 | 26.3 | 39.8 | 30.1 | 15.2 | | 36.1 | | 37.5 | 37.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 3.9 | 7.6 | 2.3 | 0.6 | 1.1 | | 2.1 | | 301.1 | 59.6 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.4 | 30.2 | 33.9 | 42.1 | 30.6 | 16.4 | | 38.2 | | 338.6 | 97.1 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 31.1 | C | | 23.0 | C | | 38.2 | D | | 124.0 | F | |
| Intersection Delay, s/veh / LOS | 76.4 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.48 | A | 0.88 | A | 0.82 | A | 4.47 | D |

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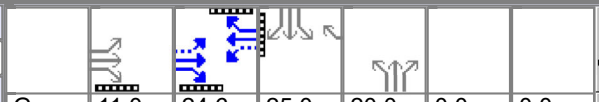
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

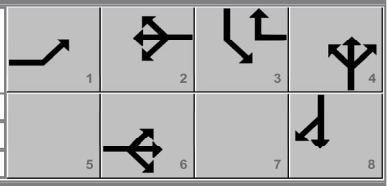


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | 1695 | 13 | 13 | 194 | 282 | 42 | 96 | 60 | 1090 | 117 | 1167 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 4.0 | | | | | 12.2 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.04 | | | | | 0.10 | | 1.00 |

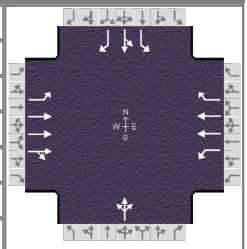
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 57 | 1163 | 579 | 13 | 198 | 288 | | 202 | | 745 | 486 | 1191 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1892 | 281 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( $g_s$ ), s | 2.0 | 26.7 | 26.7 | 4.3 | 4.4 | 11.0 | | 10.2 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.0 | 26.7 | 26.7 | 16.0 | 4.4 | 11.0 | | 10.2 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 515 | 1505 | 749 | 108 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.111 | 0.773 | 0.773 | 0.122 | 0.222 | 0.360 | | 0.566 | | 1.647 | 1.062 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 38.3 | 450.6 | 472.8 | 16.3 | 87.2 | 184.2 | | 204.9 | | 1875 | 658.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.5 | 18.0 | 18.9 | 0.7 | 3.5 | 7.4 | | 8.2 | | 75.0 | 26.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.3 | 26.3 | 26.3 | 39.8 | 30.1 | 15.5 | | 36.1 | | 37.5 | 37.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 3.9 | 7.6 | 2.3 | 0.6 | 1.3 | | 2.1 | | 301.1 | 59.6 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.4 | 30.2 | 33.9 | 42.1 | 30.6 | 16.7 | | 38.2 | | 338.6 | 97.1 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 31.1 | C | | 22.9 | C | | 38.2 | D | | 123.6 | F | |
| Intersection Delay, s/veh / LOS | 76.1 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.48 | A | 0.90 | A | 0.82 | A | 4.48 | D |

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# HCS7 Signalized Intersection Results Summary

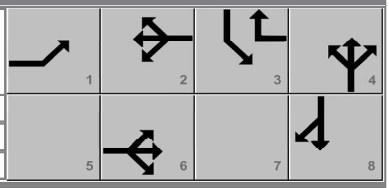
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 541 | 53 | 126 | 63 | 465 | 144 | 691 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

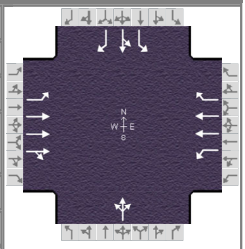
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 546 | | 244 | | 315 | 300 | 698 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( $g_s$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.684 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 381.2 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 15.2 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.2 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 4.7 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 24.0 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.3 | C | | 42.2 | D | | 17.7 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.47 | A | 0.89 | A | 2.65 | C |

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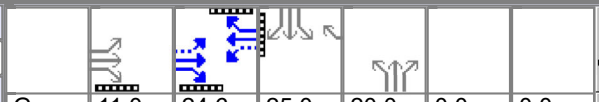
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

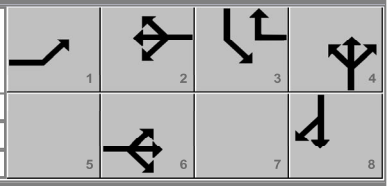


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 567 | 53 | 126 | 63 | 465 | 144 | 701 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

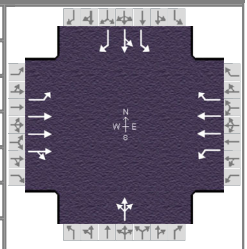
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 573 | | 244 | | 315 | 300 | 708 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( *g s* ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( *g c* ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.717 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 407.5 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 16.3 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.7 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 5.5 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 25.2 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.8 | C | | 42.2 | D | | 17.5 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.49 | A | 0.89 | A | 2.67 | C |

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# HCS7 Signalized Intersection Results Summary

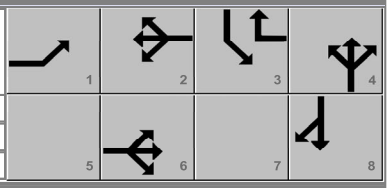
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 117 | 911 | 24 | 47 | 692 | 649 | 61 | 146 | 69 | 585 | 159 | 925 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( $g_s$ ), s | 6.4 | | | | | 16.7 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.3 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.63 | | | | | 1.00 | | 1.00 |

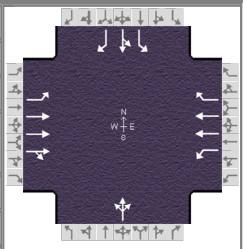
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 118 | 632 | 312 | 47 | 699 | 656 | | 279 | | 396 | 356 | 934 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1874 | 603 | 1809 | 1610 | | 1799 | | 1810 | 1850 | |
| Queue Service Time ( $g_s$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 321 | 1505 | 742 | 220 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | 0.420 | 0.421 | 0.215 | 0.785 | 0.821 | | 0.775 | | 0.875 | 0.769 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 83.5 | 229 | 232.9 | 47.5 | 334.3 | 506.2 | | 298.6 | | 415.1 | 341 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.3 | 9.2 | 9.3 | 1.9 | 13.4 | 20.2 | | 11.9 | | 16.6 | 13.6 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 23.2 | 21.9 | 21.9 | 30.9 | 35.2 | 21.4 | | 37.9 | | 36.0 | 34.8 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.9 | 1.8 | 2.2 | 6.9 | 9.3 | | 10.1 | | 17.2 | 7.7 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.9 | 22.7 | 23.6 | 33.1 | 42.1 | 30.7 | | 48.0 | | 53.2 | 42.5 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 23.1 | C | | 36.5 | D | | 48.0 | D | | 21.5 | C | |
| Intersection Delay, s/veh / LOS | 28.3 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.07 | A | 1.64 | B | 0.95 | A | 3.27 | C |

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# HCS7 Signalized Intersection Results Summary

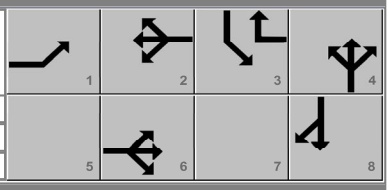
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 117 | 911 | 24 | 47 | 692 | 675 | 61 | 146 | 69 | 585 | 159 | 935 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( $g_s$ ), s | 6.4 | | | | | 16.7 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.3 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.63 | | | | | 1.00 | | 1.00 |

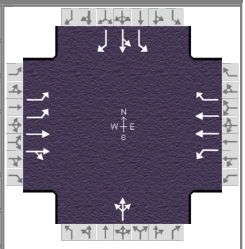
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 118 | 632 | 312 | 47 | 699 | 682 | | 279 | | 396 | 356 | 944 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1874 | 603 | 1809 | 1610 | | 1799 | | 1810 | 1850 | |
| Queue Service Time ( $g_s$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 321 | 1505 | 742 | 220 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | 0.420 | 0.421 | 0.215 | 0.785 | 0.854 | | 0.775 | | 0.875 | 0.769 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 83.5 | 229 | 232.9 | 47.5 | 334.3 | 544.5 | | 298.6 | | 415.1 | 341 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.3 | 9.2 | 9.3 | 1.9 | 13.4 | 21.8 | | 11.9 | | 16.6 | 13.6 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 23.2 | 21.9 | 21.9 | 30.9 | 35.2 | 22.0 | | 37.9 | | 36.0 | 34.8 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.9 | 1.8 | 2.2 | 6.9 | 11.2 | | 10.1 | | 17.2 | 7.7 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.9 | 22.7 | 23.6 | 33.1 | 42.1 | 33.3 | | 48.0 | | 53.2 | 42.5 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 23.1 | C | | 37.6 | D | | 48.0 | D | | 21.3 | C | |
| Intersection Delay, s/veh / LOS | 28.6 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.07 | A | 1.67 | B | 0.95 | A | 3.29 | C |

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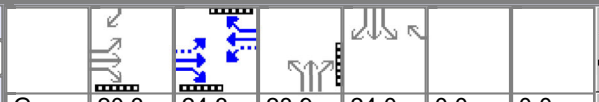
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

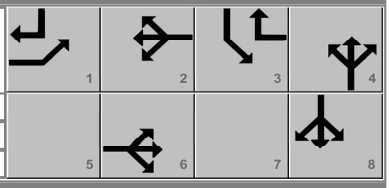


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 212 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

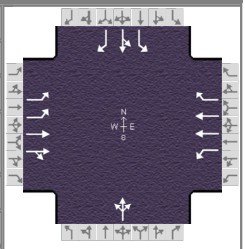
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 219 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.368 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 205.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 27.6 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.2 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 46.2 | D | |
| Intersection Delay, s/veh / LOS | 52.0 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.59 | B |

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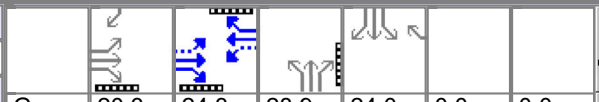
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

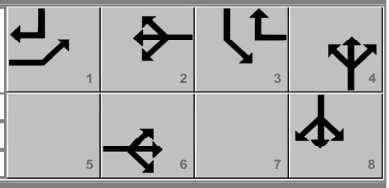


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 231 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

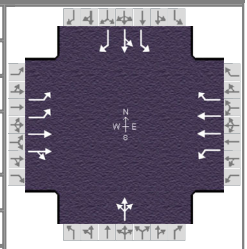
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 238 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.1 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.1 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.401 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 222.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 28.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.6 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.6 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 45.9 | D | |
| Intersection Delay, s/veh / LOS | 51.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.63 | B |

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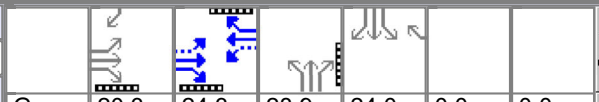
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

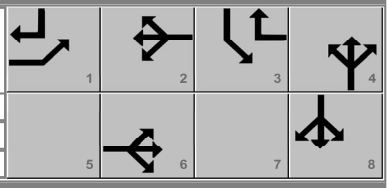


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 526 | 1684 | 17 | 16 | 473 | 24 | 45 | 12 | 19 | 482 | 6 | 250 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.4 | | | | | 6.2 | | 23.6 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.73 | | | | | 0.00 | | 1.00 |

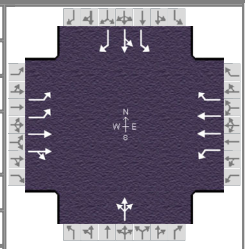
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 542 | 877 | 876 | 16 | 488 | 25 | | 78 | | 333 | 170 | 258 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1893 | 278 | 1809 | 1610 | | 1768 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.4 | 49.3 | 49.3 | 0.0 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 14.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.4 | 49.3 | 49.3 | 24.3 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 14.4 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 859 | 781 | 778 | 60 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.631 | 1.124 | 1.127 | 0.275 | 0.666 | 0.038 | | 0.184 | | 0.920 | 0.469 | 0.434 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 240.6 | 1293.3 | 1297.9 | 30.7 | 286.7 | 19.9 | | 84.6 | | 459.2 | 202.8 | 239.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.6 | 51.7 | 51.9 | 1.2 | 11.5 | 0.8 | | 3.4 | | 18.4 | 8.1 | 9.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.2 | 35.4 | 35.4 | 60.0 | 44.1 | 21.8 | | 36.2 | | 47.1 | 42.4 | 28.4 |
| Incremental Delay ( $d_2$ ), s/veh | 1.5 | 72.0 | 73.0 | 11.0 | 4.7 | 0.1 | | 0.2 | | 28.4 | 1.3 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 29.7 | 107.3 | 108.4 | 71.0 | 48.8 | 21.9 | | 36.4 | | 75.5 | 43.7 | 29.1 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 89.4 | F | | 48.3 | D | | 36.4 | D | | 52.7 | D | |
| Intersection Delay, s/veh / LOS | 74.7 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.38 | B | 0.92 | A | 0.62 | A | 1.74 | B |

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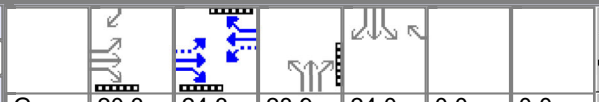
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

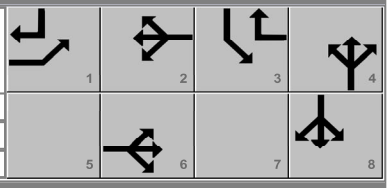


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 526 | 1684 | 17 | 16 | 473 | 24 | 45 | 12 | 19 | 482 | 6 | 269 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 15.4 | | | | | 6.2 | | 23.6 |
| Green Extension Time ( *g e* ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.73 | | | | | 0.00 | | 1.00 |

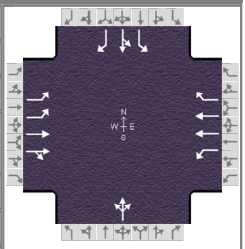
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 542 | 877 | 876 | 16 | 488 | 25 | | 78 | | 333 | 170 | 277 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1893 | 278 | 1809 | 1610 | | 1768 | | 1810 | 1813 | 1610 |
| Queue Service Time ( *g s* ), s | 13.4 | 49.3 | 49.3 | 0.0 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 15.8 |
| Cycle Queue Clearance Time ( *g c* ), s | 13.4 | 49.3 | 49.3 | 24.3 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 15.8 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 859 | 781 | 778 | 60 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.631 | 1.124 | 1.127 | 0.275 | 0.666 | 0.038 | | 0.184 | | 0.920 | 0.469 | 0.467 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 240.6 | 1293.3 | 1297.9 | 30.7 | 286.7 | 19.9 | | 84.6 | | 459.2 | 202.8 | 257.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.6 | 51.7 | 51.9 | 1.2 | 11.5 | 0.8 | | 3.4 | | 18.4 | 8.1 | 10.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 28.2 | 35.4 | 35.4 | 60.0 | 44.1 | 21.8 | | 36.2 | | 47.1 | 42.4 | 28.8 |
| Incremental Delay ( *d 2* ), s/veh | 1.5 | 72.0 | 73.0 | 11.0 | 4.7 | 0.1 | | 0.2 | | 28.4 | 1.3 | 0.8 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 29.7 | 107.3 | 108.4 | 71.0 | 48.8 | 21.9 | | 36.4 | | 75.5 | 43.7 | 29.7 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 89.4 | F | | 48.3 | D | | 36.4 | D | | 52.3 | D | |
| Intersection Delay, s/veh / LOS | 74.5 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.38 | B | 0.92 | A | 0.62 | A | 1.78 | B |

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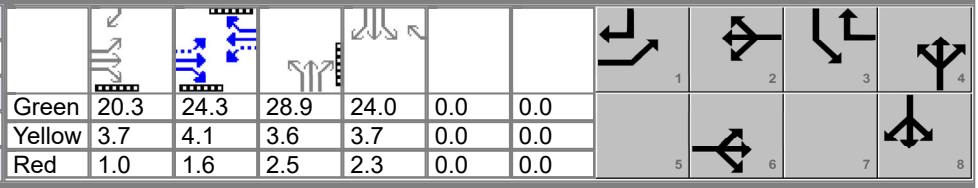
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 13, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 228 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |




| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 15.2 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.3 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.45 |

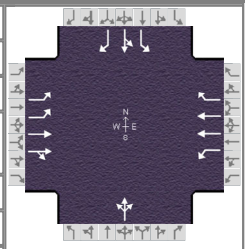
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 235 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.395 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 219.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 8.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.0 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.6 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 28.6 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.5 | D | |
| Intersection Delay, s/veh / LOS | 76.6 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.45 | A |

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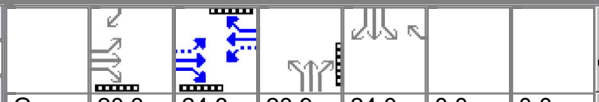
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

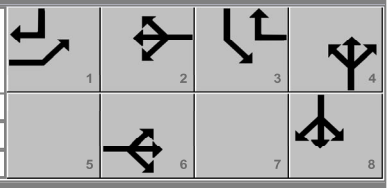


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 254 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 16.7 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.65 |

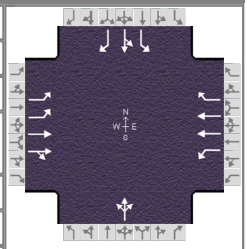
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 262 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.7 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.441 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 243.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 9.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.5 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 29.2 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.3 | D | |
| Intersection Delay, s/veh / LOS | 76.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.49 | A |

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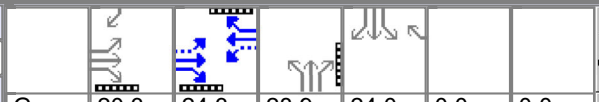
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

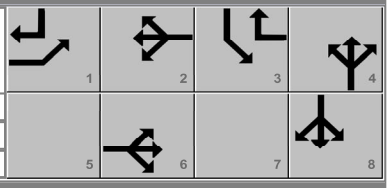


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 544 | 951 | 20 | 25 | 1074 | 84 | 36 | 14 | 14 | 303 | 21 | 253 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 16.1 | | | | | 5.5 | | 16.6 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | 0.2 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.95 | | | | | 0.00 | | 0.63 |

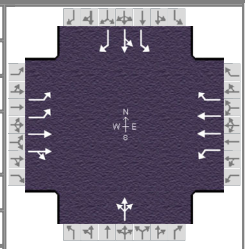
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 561 | 502 | 499 | 26 | 1107 | 87 | | 66 | | 209 | 125 | 261 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1886 | 572 | 1809 | 1610 | | 1780 | | 1810 | 1825 | 1610 |
| Queue Service Time ( $g_s$ ), s | 14.1 | 25.4 | 25.4 | 4.5 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 14.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 14.1 | 25.4 | 25.4 | 5.0 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 14.6 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 775 | 174 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.785 | 0.644 | 0.644 | 0.148 | 1.511 | 0.134 | | 0.154 | | 0.578 | 0.342 | 0.439 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 263.1 | 447.7 | 445.1 | 32.6 | 1338.2 | 72.5 | | 70.7 | | 247.2 | 146.7 | 242.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.5 | 17.9 | 17.8 | 1.3 | 53.5 | 2.9 | | 2.8 | | 9.9 | 5.9 | 9.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 30.0 | 28.3 | 28.3 | 40.3 | 47.9 | 22.6 | | 35.9 | | 43.4 | 41.2 | 28.5 |
| Incremental Delay ( $d_2$ ), s/veh | 5.8 | 4.1 | 4.1 | 1.8 | 237.2 | 0.4 | | 0.2 | | 2.8 | 0.8 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 35.8 | 32.4 | 32.4 | 42.1 | 285.0 | 23.1 | | 36.1 | | 46.2 | 42.0 | 29.2 |
| Level of Service (LOS) | D | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 33.6 | C | | 261.3 | F | | 36.1 | D | | 37.9 | D | |
| Intersection Delay, s/veh / LOS | 115.1 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.78 | B | 1.49 | A | 0.60 | A | 1.47 | A |

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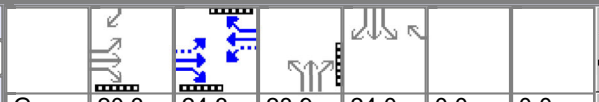
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

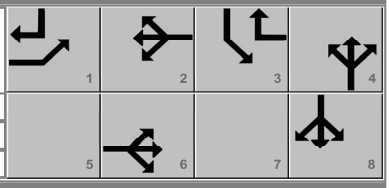


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 544 | 951 | 20 | 25 | 1074 | 84 | 36 | 14 | 14 | 303 | 21 | 279 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 16.1 | | | | | 5.5 | | 18.5 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | 0.2 | | 1.8 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.95 | | | | | 0.00 | | 0.95 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 561 | 502 | 499 | 26 | 1107 | 87 | | 66 | | 209 | 125 | 288 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1886 | 572 | 1809 | 1610 | | 1780 | | 1810 | 1825 | 1610 |
| Queue Service Time ( $g_s$ ), s | 14.1 | 25.4 | 25.4 | 4.5 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 16.5 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 14.1 | 25.4 | 25.4 | 5.0 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 16.5 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 775 | 174 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.785 | 0.644 | 0.644 | 0.148 | 1.511 | 0.134 | | 0.154 | | 0.578 | 0.342 | 0.484 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 263.1 | 447.7 | 445.1 | 32.6 | 1338.2 | 72.5 | | 70.7 | | 247.2 | 146.7 | 266.9 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.5 | 17.9 | 17.8 | 1.3 | 53.5 | 2.9 | | 2.8 | | 9.9 | 5.9 | 10.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 30.0 | 28.3 | 28.3 | 40.3 | 47.9 | 22.6 | | 35.9 | | 43.4 | 41.2 | 29.1 |
| Incremental Delay ( $d_2$ ), s/veh | 5.8 | 4.1 | 4.1 | 1.8 | 237.2 | 0.4 | | 0.2 | | 2.8 | 0.8 | 0.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 35.8 | 32.4 | 32.4 | 42.1 | 285.0 | 23.1 | | 36.1 | | 46.2 | 42.0 | 29.9 |
| Level of Service (LOS) | D | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 33.6 | C | | 261.3 | F | | 36.1 | D | | 37.8 | D | |
| Intersection Delay, s/veh / LOS | 114.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.78 | B | 1.49 | A | 0.60 | A | 1.51 | B |

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# HCS7 Two-Way Stop-Control Report

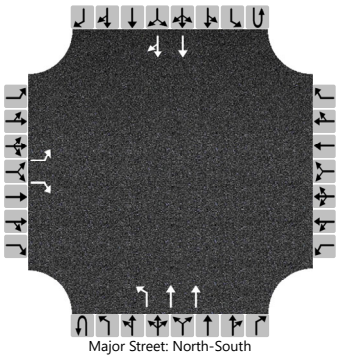
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 55 | | 20 | | | | | 0 | 33 | 188 | | | | 536 | 30 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 62 | | 22 | | | | | | 37 | | | | | | |
| Capacity, c (veh/h) | | 473 | | 675 | | | | | | 937 | | | | | | |
| v/c Ratio | | 0.13 | | 0.03 | | | | | | 0.04 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.4 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 13.7 | | 10.5 | | | | | | 9.0 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.9 | | | | | | | | 1.3 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

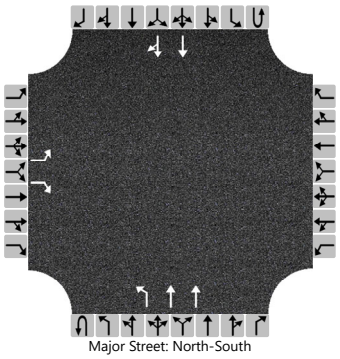
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 98 | | 48 | | | | | 0 | 57 | 188 | | | | 536 | 101 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 110 | | 54 | | | | | | 64 | | | | | | |
| Capacity, c (veh/h) | | 446 | | 636 | | | | | | 874 | | | | | | |
| v/c Ratio | | 0.25 | | 0.08 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.0 | | 0.3 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 15.7 | | 11.2 | | | | | | 9.4 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.2 | | | | | | | | 2.2 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

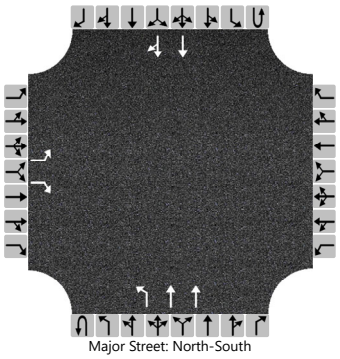
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2027 |
| Time Analyzed | Future - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 59 | | 21 | | | | | 0 | 35 | 451 | | | | 1018 | 32 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 66 | | 24 | | | | | | 39 | | | | | | |
| Capacity, c (veh/h) | | 247 | | 448 | | | | | | 582 | | | | | | |
| v/c Ratio | | 0.27 | | 0.05 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.1 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 24.9 | | 13.5 | | | | | | 11.6 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 21.9 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | | | | | | | |

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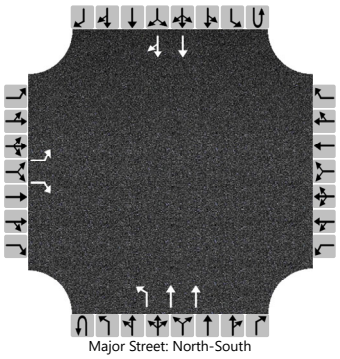
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2027 |
| Time Analyzed | Future + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 102 | | 49 | | | | | 0 | 59 | 451 | | | | 1018 | 103 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 115 | | 55 | | | | | | 66 | | | | | | |
| Capacity, c (veh/h) | | 234 | | 422 | | | | | | 542 | | | | | | |
| v/c Ratio | | 0.49 | | 0.13 | | | | | | 0.12 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 2.5 | | 0.4 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 34.4 | | 14.8 | | | | | | 12.6 | | | | | | |
| Level of Service (LOS) | | D | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 28.0 | | | | | | | | 1.5 | | | | | | |
| Approach LOS | | D | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

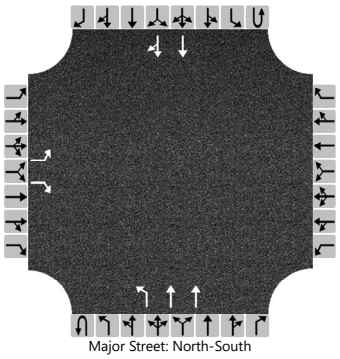
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 10/13/2020 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 38 | | 24 | | | | | 0 | 33 | 345 | | | | 235 | 40 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 47 | | 30 | | | | | | 41 | | | | | | |
| Capacity, c (veh/h) | | 611 | | 841 | | | | | | 1209 | | | | | | |
| v/c Ratio | | 0.08 | | 0.04 | | | | | | 0.03 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.2 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 11.4 | | 9.4 | | | | | | 8.1 | | | | | | |
| Level of Service (LOS) | | B | | A | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 10.6 | | | | | | | | 0.7 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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# HCS7 Two-Way Stop-Control Report

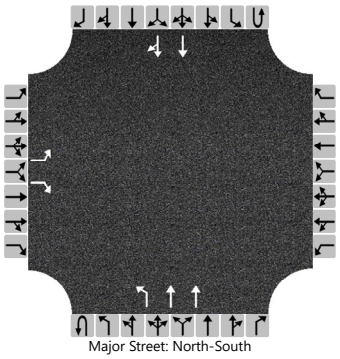
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 98 | | 64 | | | | | 0 | 65 | 345 | | | | 235 | 137 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 121 | | 79 | | | | | | 80 | | | | | | |
| Capacity, c (veh/h) | | 538 | | 770 | | | | | | 1091 | | | | | | |
| v/c Ratio | | 0.22 | | 0.10 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.9 | | 0.3 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 13.6 | | 10.2 | | | | | | 8.6 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.3 | | | | | | | | 1.4 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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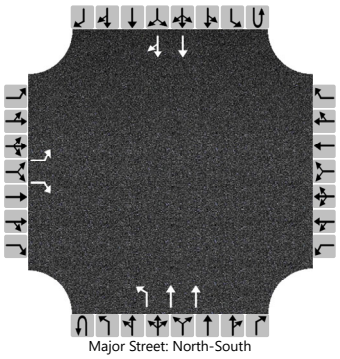
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2027 |
| Time Analyzed | Future - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 41 | | 26 | | | | | 0 | 35 | 793 | | | | 543 | 43 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 51 | | 32 | | | | | | 43 | | | | | | |
| Capacity, c (veh/h) | | 378 | | 632 | | | | | | 868 | | | | | | |
| v/c Ratio | | 0.13 | | 0.05 | | | | | | 0.05 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.5 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 16.0 | | 11.0 | | | | | | 9.4 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.0 | | | | | | | | 0.4 | | | | | | |
| Approach LOS | | B | | | | | | | | | | | | | | |

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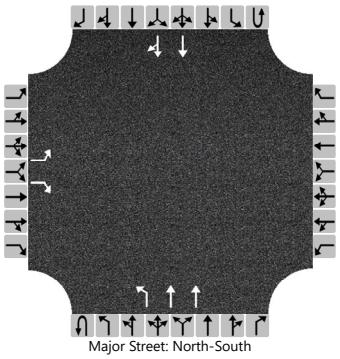
## General Information

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|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 8/5/2022 |
| Analysis Year | 2027 |
| Time Analyzed | Future + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Univ Hlywd / Hilton Dwy |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 101 | | 66 | | | | | 0 | 67 | 793 | | | | 543 | 140 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

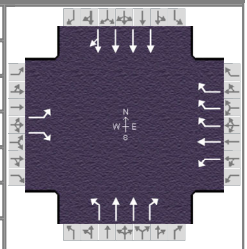
## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 125 | | 81 | | | | | | 83 | | | | | | |
| Capacity, c (veh/h) | | 335 | | 578 | | | | | | 782 | | | | | | |
| v/c Ratio | | 0.37 | | 0.14 | | | | | | 0.11 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.7 | | 0.5 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 22.0 | | 12.3 | | | | | | 10.1 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 18.2 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | | | | | | | |

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# HCS7 Signalized Intersection Results Summary

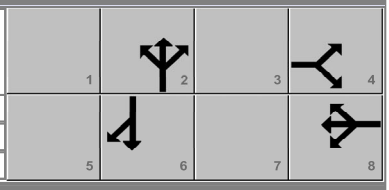
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 77 | 140 | 273 | 771 | 28 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.5 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.07 | | 0.70 | | | | |

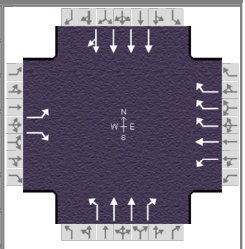
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 83 | 151 | 294 | 829 | 30 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 1.6 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 4.0 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.319 | 0.307 | 0.570 | 0.715 | 0.062 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 72.3 | 112 | 229.7 | 228.3 | 19.9 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 2.9 | 4.5 | 9.2 | 9.1 | 0.8 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 33.4 | 26.1 | 28.3 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 0.7 | 0.4 | 1.5 | 2.1 | 0.2 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 34.1 | 26.4 | 29.8 | 31.8 | 18.9 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | C | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.2 | | C | 30.7 | | C | 13.7 | | B | 17.5 | | B |
| Intersection Delay, s/veh / LOS | 26.1 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.59 | C | 0.81 | A | 0.61 | A |

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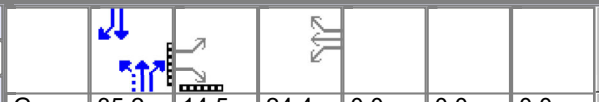
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

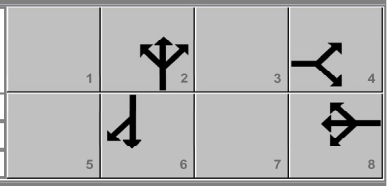


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 105 | 140 | 293 | 771 | 32 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 7.7 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.19 | | 0.71 | | | | |

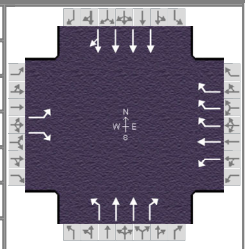
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 113 | 151 | 315 | 829 | 34 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 5.7 | 6.0 | 13.0 | 15.8 | 1.8 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 5.7 | 6.0 | 13.0 | 15.8 | 4.2 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.435 | 0.307 | 0.612 | 0.715 | 0.071 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 101.2 | 112 | 248.1 | 228.3 | 22.8 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 4.0 | 4.5 | 9.9 | 9.1 | 0.9 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 34.1 | 26.1 | 28.7 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 1.2 | 0.4 | 2.1 | 2.1 | 0.3 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 35.2 | 26.4 | 30.8 | 31.8 | 19.0 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | D | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.8 | | C | 30.9 | | C | 13.8 | | B | 17.5 | | B |
| Intersection Delay, s/veh / LOS | 26.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.62 | C | 0.81 | A | 0.61 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

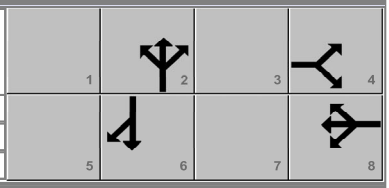


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | | 83 | 150 | 296 | 1000 | 30 | 310 | 109 | | 332 | 40 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.9 | | 24.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.10 | | 1.00 | | | | |

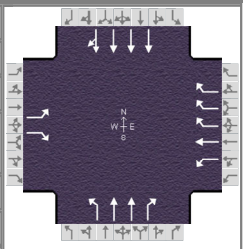
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 110 | | 89 | 161 | 318 | 1075 | 32 | 333 | 117 | | 302 | 98 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1000 | 1809 | | | 1900 | 1761 |
| Queue Service Time ( $g_s$ ), s | 4.9 | | 4.4 | 6.4 | 13.2 | 22.0 | 1.9 | 5.6 | | | 3.1 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.9 | | 4.4 | 6.4 | 13.2 | 22.0 | 5.2 | 5.6 | | | 3.1 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 435 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.376 | | 0.344 | 0.329 | 0.618 | 0.928 | 0.074 | 0.236 | | | 0.136 | 0.142 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 96.7 | | 78.4 | 121.1 | 250.9 | 331.8 | 22 | 107.2 | | | 61.4 | 62.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | | 3.1 | 4.8 | 10.0 | 13.3 | 0.9 | 4.3 | | | 2.5 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 33.5 | 26.2 | 28.7 | 31.9 | 19.3 | 18.4 | | | 17.6 | 17.7 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 0.8 | 0.4 | 2.2 | 12.7 | 0.3 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.5 | | 34.3 | 26.6 | 31.0 | 44.7 | 19.7 | 18.8 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | C | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.4 | C | | 40.0 | D | | 14.3 | B | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 31.5 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.05 | C | 0.89 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

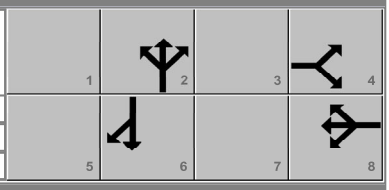
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | | 111 | 150 | 316 | 1000 | 34 | 310 | 109 | | 332 | 40 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 8.0 | | 24.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.25 | | 1.00 | | | | |

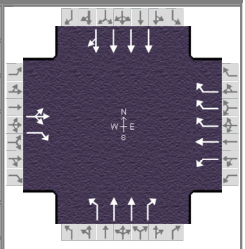
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 110 | | 119 | 161 | 340 | 1075 | 37 | 333 | 117 | | 302 | 98 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1000 | 1809 | | | 1900 | 1761 |
| Queue Service Time ( $g_s$ ), s | 4.9 | | 6.0 | 6.4 | 14.3 | 22.0 | 2.2 | 5.6 | | | 3.1 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.9 | | 6.0 | 6.4 | 14.3 | 22.0 | 5.4 | 5.6 | | | 3.1 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 435 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.376 | | 0.460 | 0.329 | 0.660 | 0.928 | 0.084 | 0.236 | | | 0.136 | 0.142 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 96.7 | | 107.7 | 121.1 | 270.2 | 331.8 | 25 | 107.2 | | | 61.4 | 62.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | | 4.3 | 4.8 | 10.8 | 13.3 | 1.0 | 4.3 | | | 2.5 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 34.2 | 26.2 | 29.1 | 31.9 | 19.4 | 18.4 | | | 17.6 | 17.7 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 1.3 | 0.4 | 3.1 | 12.7 | 0.4 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.5 | | 35.5 | 26.6 | 32.2 | 44.7 | 19.8 | 18.8 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | D | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 35.0 | | D | 40.1 | | D | 14.3 | | B | 17.8 | | B |
| Intersection Delay, s/veh / LOS | 31.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.09 | C | 0.89 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM (Improvements) | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 0 | 111 | 150 | 316 | 1000 | 34 | 310 | 109 | | 332 | 40 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 11.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 9.2 | | 24.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.49 | | 1.00 | | | | |

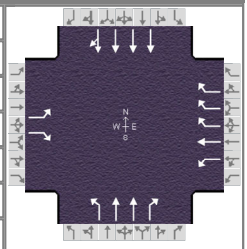
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | 149 | 80 | 161 | 340 | 1075 | 37 | 333 | 117 | | 302 | 98 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1757 | 1610 | 1810 | 1900 | 1425 | 1000 | 1809 | | | 1900 | 1761 |
| Queue Service Time ( $g_s$ ), s | | 7.2 | 3.9 | 6.4 | 14.3 | 22.0 | 2.2 | 5.6 | | | 3.1 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 7.2 | 3.9 | 6.4 | 14.3 | 22.0 | 5.4 | 5.6 | | | 3.1 | 3.2 |
| Green Ratio ( *g/C* ) | | 0.16 | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | | 283 | 259 | 491 | 515 | 1159 | 435 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.527 | 0.308 | 0.329 | 0.660 | 0.928 | 0.084 | 0.236 | | | 0.136 | 0.142 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | 144.4 | 69.7 | 121.1 | 270.2 | 331.8 | 25 | 107.2 | | | 61.4 | 62.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 5.8 | 2.8 | 4.8 | 10.8 | 13.3 | 1.0 | 4.3 | | | 2.5 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 36.4 | 33.3 | 26.2 | 29.1 | 31.9 | 19.4 | 18.4 | | | 17.6 | 17.7 |
| Incremental Delay ( $d_2$ ), s/veh | | 1.8 | 0.7 | 0.4 | 3.1 | 12.7 | 0.4 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 38.2 | 34.0 | 26.6 | 32.2 | 44.7 | 19.8 | 18.8 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | | D | C | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 36.8 | D | | 40.1 | D | | 14.3 | B | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 31.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | 0.87 | A | 3.09 | C | 0.89 | A | 0.65 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

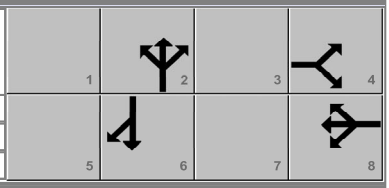


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 284 | 193 | 83 | 171 | 7 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

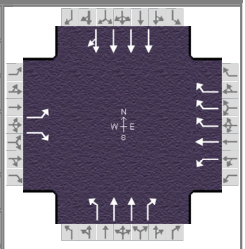
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 302 | 205 | 88 | 182 | 7 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 0.9 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 10.2 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.165 | 0.419 | 0.171 | 0.157 | 0.032 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 516.2 | 158.5 | 63.1 | 42.7 | 5.9 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 20.6 | 6.3 | 2.5 | 1.7 | 0.2 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.1 | 25.0 | 23.1 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 107.8 | 0.6 | 0.2 | 0.1 | 0.3 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 145.6 | 27.5 | 25.2 | 25.0 | 23.4 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 127.9 | | F | 26.2 | | C | 7.9 | | A | 20.2 | | C |
| Intersection Delay, s/veh / LOS | 36.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.27 | A | 0.76 | A | 0.93 | A |

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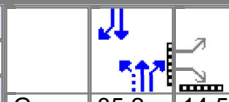
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

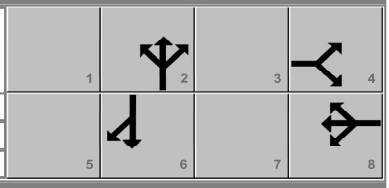


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 324 | 193 | 110 | 171 | 12 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.7 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

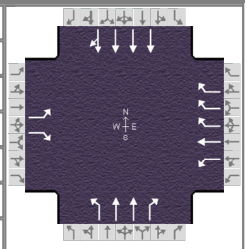
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 345 | 205 | 117 | 182 | 13 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 4.3 | 2.9 | 1.6 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 4.3 | 2.9 | 10.8 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.329 | 0.419 | 0.227 | 0.157 | 0.054 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 701.2 | 158.5 | 85.1 | 42.7 | 10.2 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 28.0 | 6.3 | 3.4 | 1.7 | 0.4 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.5 | 25.0 | 23.3 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 172.0 | 0.6 | 0.2 | 0.1 | 0.4 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 209.8 | 27.5 | 25.7 | 25.0 | 23.8 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 184.9 | | F | 26.2 | | C | 8.1 | | A | 20.2 | | C |
| Intersection Delay, s/veh / LOS | 48.3 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.32 | A | 0.77 | A | 0.93 | A |

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# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

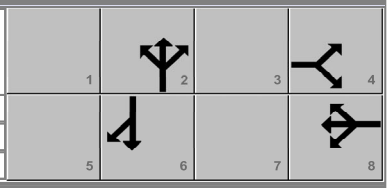


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 57 | | 304 | 207 | 90 | 61 | 8 | 70 | 202 | | 1408 | 100 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 11.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.1 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

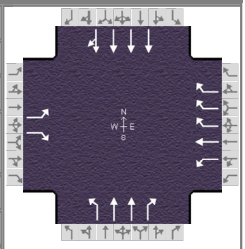
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 61 | | 323 | 220 | 96 | 65 | 9 | 74 | 215 | | 1217 | 387 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 321 | 1809 | | | 1900 | 1810 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 9.1 | 3.5 | 1.0 | 1.9 | 1.2 | | | 14.8 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 9.1 | 3.5 | 1.0 | 16.8 | 1.2 | | | 14.8 | 14.9 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 152 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.208 | | 1.247 | 0.449 | 0.186 | 0.056 | 0.056 | 0.053 | | | 0.546 | 0.547 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 51.7 | | 606 | 172.1 | 68.6 | 14.8 | 7.9 | 22.1 | | | 272.9 | 276.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.1 | | 24.2 | 6.9 | 2.7 | 0.6 | 0.3 | 0.9 | | | 10.9 | 11.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.8 | | 37.8 | 27.2 | 25.2 | 24.3 | 27.7 | 17.0 | | | 21.2 | 21.2 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 139.0 | 0.6 | 0.2 | 0.0 | 0.7 | 0.1 | | | 1.0 | 3.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 176.8 | 27.9 | 25.3 | 24.3 | 28.4 | 17.1 | 0.0 | | 22.2 | 24.2 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 154.1 | | F | 26.6 | | C | 5.1 | | A | 22.7 | | C |
| Intersection Delay, s/veh / LOS | 40.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.12 | A | 0.73 | A | 1.15 | A |

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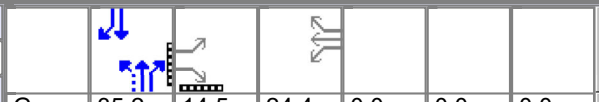
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

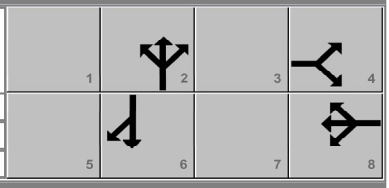


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 57 | | 344 | 207 | 117 | 61 | 13 | 70 | 202 | | 1408 | 100 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 11.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

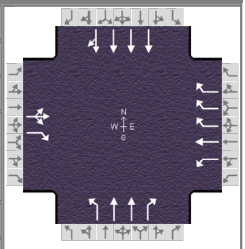
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 61 | | 366 | 220 | 124 | 65 | 14 | 74 | 215 | | 1217 | 387 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 321 | 1809 | | | 1900 | 1810 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 9.1 | 4.6 | 1.0 | 3.1 | 1.2 | | | 14.8 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 9.1 | 4.6 | 1.0 | 18.0 | 1.2 | | | 14.8 | 14.9 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 152 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.208 | | 1.411 | 0.449 | 0.242 | 0.056 | 0.091 | 0.053 | | | 0.546 | 0.547 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 51.7 | | 800.1 | 172.1 | 90.9 | 14.8 | 13.1 | 22.1 | | | 272.9 | 276.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.1 | | 32.0 | 6.9 | 3.6 | 0.6 | 0.5 | 0.9 | | | 10.9 | 11.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.8 | | 37.8 | 27.2 | 25.6 | 24.3 | 28.2 | 17.0 | | | 21.2 | 21.2 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 206.2 | 0.6 | 0.2 | 0.0 | 1.2 | 0.1 | | | 1.0 | 3.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 243.9 | 27.9 | 25.8 | 24.3 | 29.4 | 17.1 | 0.0 | | 22.2 | 24.2 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 214.0 | | F | 26.7 | | C | 5.5 | | A | 22.7 | | C |
| Intersection Delay, s/veh / LOS | 51.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.16 | A | 0.74 | A | 1.15 | A |

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# HCS7 Signalized Intersection Results Summary

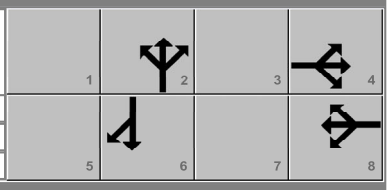
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM (Improvements) | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 57 | 0 | 344 | 207 | 117 | 61 | 13 | 70 | 202 | | 1408 | 100 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 11.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 15.6 | | 11.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

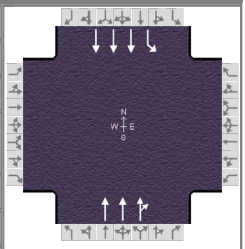
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | 181 | 245 | 220 | 124 | 65 | 14 | 74 | 215 | | 1217 | 387 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | 1677 | 1610 | 1810 | 1900 | 1425 | 321 | 1809 | | | 1900 | 1810 |
| Queue Service Time ( $g_s$ ), s | | 9.6 | 13.6 | 9.1 | 4.6 | 1.0 | 3.1 | 1.2 | | | 14.8 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | 9.6 | 13.6 | 9.1 | 4.6 | 1.0 | 18.0 | 1.2 | | | 14.8 | 14.9 |
| Green Ratio ( *g/C* ) | | 0.16 | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | | 270 | 259 | 491 | 515 | 1159 | 152 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | | 0.671 | 0.945 | 0.449 | 0.242 | 0.056 | 0.091 | 0.053 | | | 0.546 | 0.547 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | 204.2 | 319.8 | 172.1 | 90.9 | 14.8 | 13.1 | 22.1 | | | 272.9 | 276.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | 8.2 | 12.8 | 6.9 | 3.6 | 0.6 | 0.5 | 0.9 | | | 10.9 | 11.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | 40.2 | 37.4 | 27.2 | 25.6 | 24.3 | 28.2 | 17.0 | | | 21.2 | 21.2 |
| Incremental Delay ( $d_2$ ), s/veh | | 6.3 | 41.0 | 0.6 | 0.2 | 0.0 | 1.2 | 0.1 | | | 1.0 | 3.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | 46.6 | 78.4 | 27.9 | 25.8 | 24.3 | 29.4 | 17.1 | 0.0 | | 22.2 | 24.2 |
| Level of Service (LOS) | | D | E | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 64.9 | E | | 26.7 | C | | 5.5 | A | | 22.7 | C | |
| Intersection Delay, s/veh / LOS | 27.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | 1.19 | A | 1.16 | A | 0.74 | A | 1.15 | A |

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# HCS7 Signalized Intersection Results Summary

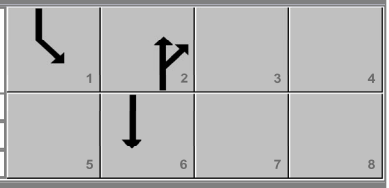
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 366 | 114 | 116 | 265 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

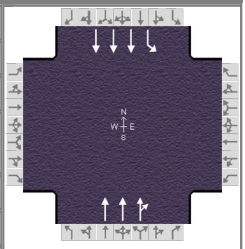
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 345 | 160 | 122 | 279 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1674 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 988 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.154 | 0.162 | 0.266 | 0.058 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.4 | 37.4 | 58.4 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.3 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.5 | 5.6 | 17.9 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.0 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 5.6 | | A |
| Intersection Delay, s/veh / LOS | 5.7 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.71 | A |

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# HCS7 Signalized Intersection Results Summary

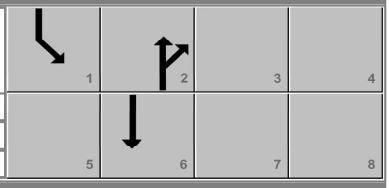
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 370 | 114 | 131 | 278 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.7 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

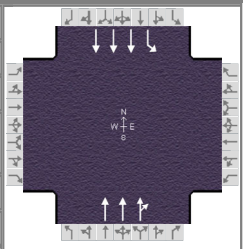
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 348 | 162 | 138 | 293 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1676 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.5 | 2.6 | 3.7 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.5 | 2.6 | 3.7 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 989 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.155 | 0.163 | 0.301 | 0.061 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.9 | 37.9 | 66.6 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.7 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.6 | 5.6 | 18.1 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.2 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 6.0 | | A |
| Intersection Delay, s/veh / LOS | 5.9 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.72 | A |

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# HCS7 Signalized Intersection Results Summary

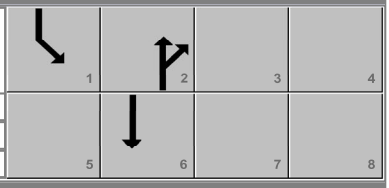
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 452 | 122 | 154 | 311 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.4 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

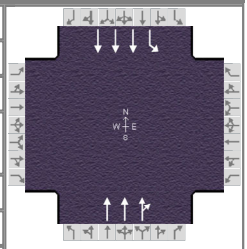
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 413 | 191 | 162 | 327 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1695 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.0 | 3.1 | 4.4 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.0 | 3.1 | 4.4 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1000 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.184 | 0.191 | 0.354 | 0.069 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 45.9 | 45.7 | 79.4 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.2 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.7 | 5.7 | 18.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.5 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.3 | | A |
| Intersection Delay, s/veh / LOS | 6.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.82 | A | 0.76 | A |

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# HCS7 Signalized Intersection Results Summary

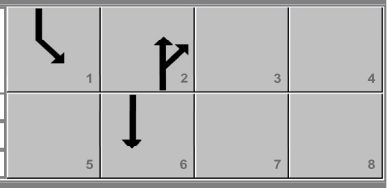
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 456 | 122 | 169 | 324 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.9 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.01 | |

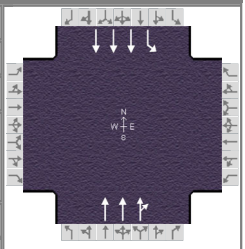
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 416 | 193 | 178 | 341 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1696 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.0 | 3.2 | 4.9 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.0 | 3.2 | 4.9 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1001 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.185 | 0.192 | 0.388 | 0.071 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 46.2 | 46.1 | 88.1 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.5 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.7 | 5.7 | 18.5 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.7 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.6 | | A |
| Intersection Delay, s/veh / LOS | 6.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.82 | A | 0.77 | A |

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# HCS7 Signalized Intersection Results Summary

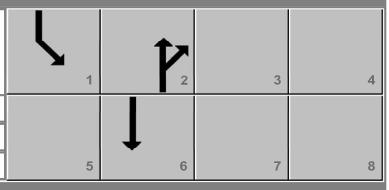
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM (Improvements) | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 456 | 122 | 169 | 324 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.2 | 30.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 35.0 | 25.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.3 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.3 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

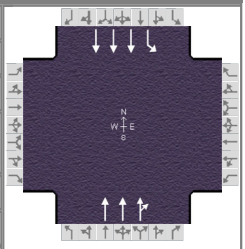
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 416 | 193 | 178 | 341 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1696 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.6 | 3.8 | 4.3 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.6 | 3.8 | 4.3 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.51 | 0.51 | 0.34 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 1925 | 860 | 609 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.216 | 0.224 | 0.292 | 0.071 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 61.3 | 60.7 | 75.5 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 2.5 | 2.4 | 3.0 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 8.2 | 8.2 | 14.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.3 | 0.6 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 8.5 | 8.8 | 14.7 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 8.6 | | A | 5.2 | | A |
| Intersection Delay, s/veh / LOS | 7.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.36 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.82 | A | 0.77 | A |

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# HCS7 Signalized Intersection Results Summary

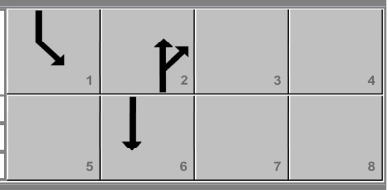
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | 10/13/2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 303 | 70 | 385 | 639 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 15.1 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

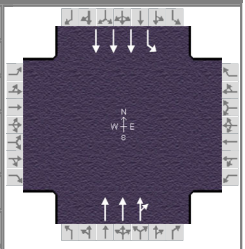
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 269 | 128 | 410 | 680 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1720 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1015 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.120 | 0.126 | 0.893 | 0.142 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 28.6 | 29.2 | 303.1 | 1.2 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.2 | 12.1 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 21.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 19.0 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 40.6 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 15.4 | | B |
| Intersection Delay, s/veh / LOS | 12.8 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.09 | A |

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# HCS7 Signalized Intersection Results Summary

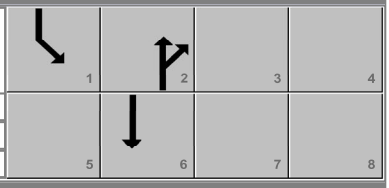
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 308 | 70 | 406 | 658 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 16.0 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

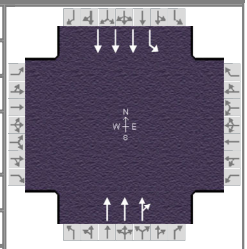
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 272 | 130 | 432 | 700 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1722 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 14.0 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 14.0 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1016 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.121 | 0.128 | 0.942 | 0.146 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 29 | 29.6 | 350.6 | 1.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.2 | 1.2 | 14.0 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.5 | 22.0 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 27.7 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 49.7 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 19.1 | | B |
| Intersection Delay, s/veh / LOS | 15.6 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.11 | A |

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# HCS7 Signalized Intersection Results Summary

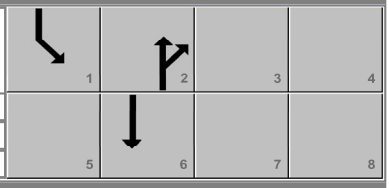
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 271 | 75 | 589 | 866 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

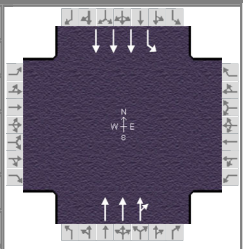
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 250 | 118 | 627 | 921 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1695 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.7 | 1.8 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.7 | 1.8 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1000 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.111 | 0.118 | 1.367 | 0.193 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 26.4 | 26.9 | 1099.2 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.1 | 44.0 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 178.6 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 201.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 81.6 | | F |
| Intersection Delay, s/veh / LOS | 67.0 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.69 | A | 1.34 | A |

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# HCS7 Signalized Intersection Results Summary

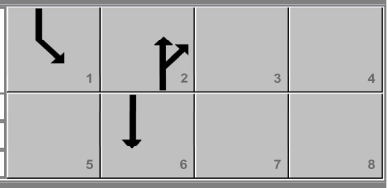
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 276 | 75 | 610 | 885 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

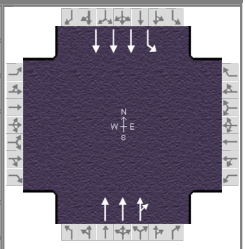
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 253 | 120 | 649 | 941 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1697 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.8 | 1.9 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.8 | 1.9 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1001 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.113 | 0.120 | 1.416 | 0.197 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 26.8 | 27.3 | 1205.8 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.1 | 48.2 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 199.6 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 222.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 90.7 | | F |
| Intersection Delay, s/veh / LOS | 74.6 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.69 | A | 1.36 | A |

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# HCS7 Signalized Intersection Results Summary

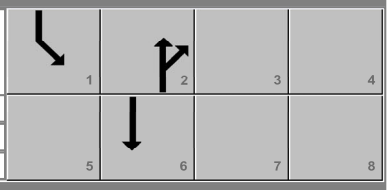
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 5, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM (Improvements) | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future with Project (Improvements).xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 276 | 75 | 610 | 885 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 20.2 | 30.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 35.0 | 25.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 22.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

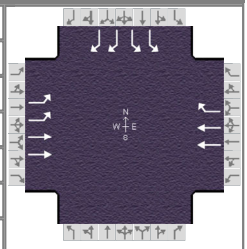
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 253 | 120 | 649 | 941 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1697 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.1 | 2.3 | 20.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.1 | 2.3 | 20.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.51 | 0.51 | 0.34 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 1925 | 860 | 609 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.132 | 0.140 | 1.065 | 0.197 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 35.6 | 36 | 619.7 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.4 | 1.4 | 24.8 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 7.8 | 7.9 | 19.9 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 55.1 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 8.0 | 8.2 | 75.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 8.0 | | A | 30.8 | | C |
| Intersection Delay, s/veh / LOS | 26.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.36 | A | 0.53 | A |
| Bicycle LOS Score / LOS | | | | | 0.69 | A | 1.36 | A |

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# HCS7 Signalized Intersection Results Summary

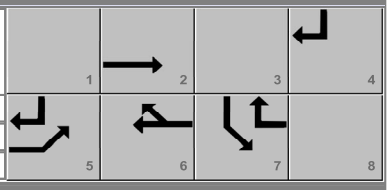
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 139 | | | | 120 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( *g s* ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( *g e* ), s | 1.0 | 0.0 | | 0.0 | | | | 2.1 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

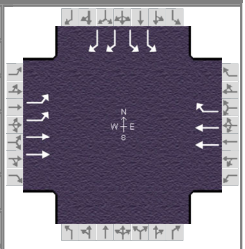
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 153 | | | | 132 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.134 | | | | 0.089 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 53.9 | | | | 50.4 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.0 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.0 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.2 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.0 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.2 | C | | 0.0 | | | 15.7 | B | |
| Intersection Delay, s/veh / LOS | 33.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.91 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

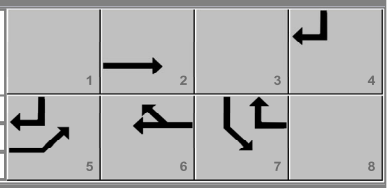
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 143 | | | | 133 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | | | 2.2 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

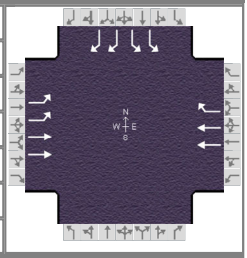
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 157 | | | | 146 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.138 | | | | 0.099 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 55.5 | | | | 56.1 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.2 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.1 | | 11.3 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.3 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.1 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.1 | C | | 0.0 | | | 16.0 | B | |
| Intersection Delay, s/veh / LOS | 32.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.92 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

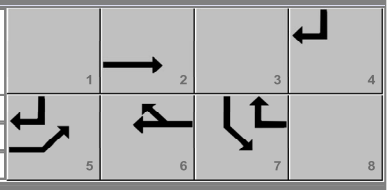
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 383 | 1651 | | | 407 | 192 | | | | 154 | | 160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 15.7 | | | | | | | 5.5 |
| Green Extension Time ( *g e* ), s | 0.8 | 0.0 | | 0.0 | | | | 2.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

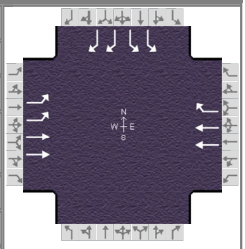
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 421 | 1814 | | | 447 | 211 | | | | 169 | | 176 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 13.7 | 59.5 | | | 12.1 | 5.3 | | | | 3.5 | | 3.3 |
| Cycle Queue Clearance Time ( *g c* ), s | 13.7 | 59.5 | | | 12.1 | 5.3 | | | | 3.5 | | 3.3 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.752 | 1.011 | | | 0.430 | 0.185 | | | | 0.115 | | 0.107 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 264.7 | 993.7 | | | 231.9 | 77.6 | | | | 65.4 | | 46.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.6 | 39.7 | | | 9.3 | 3.1 | | | | 2.6 | | 1.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 48.2 | 30.3 | | | 34.8 | 5.9 | | | | 21.2 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 6.1 | 24.1 | | | 1.3 | 0.4 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 54.3 | 54.4 | | | 36.1 | 6.3 | | | | 21.3 | | 11.4 |
| Level of Service (LOS) | D | F | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 54.3 | D | | 26.5 | C | | 0.0 | | | 16.2 | B | |
| Intersection Delay, s/veh / LOS | 44.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 1.03 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

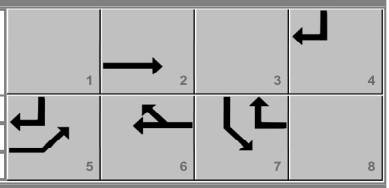
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 383 | 1651 | | | 407 | 196 | | | | 167 | | 160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 15.7 | | | | | | | 5.8 |
| Green Extension Time ( *g e* ), s | 0.8 | 0.0 | | 0.0 | | | | 2.6 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

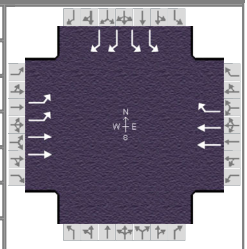
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 421 | 1814 | | | 447 | 215 | | | | 184 | | 176 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 13.7 | 59.5 | | | 12.1 | 5.4 | | | | 3.8 | | 3.3 |
| Cycle Queue Clearance Time ( *g c* ), s | 13.7 | 59.5 | | | 12.1 | 5.4 | | | | 3.8 | | 3.3 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.752 | 1.011 | | | 0.430 | 0.189 | | | | 0.124 | | 0.107 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 264.7 | 993.7 | | | 231.9 | 79.3 | | | | 71.3 | | 46.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.6 | 39.7 | | | 9.3 | 3.2 | | | | 2.9 | | 1.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 48.2 | 30.3 | | | 34.8 | 5.9 | | | | 21.3 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 6.1 | 24.1 | | | 1.3 | 0.4 | | | | 0.1 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 54.3 | 54.4 | | | 36.1 | 6.3 | | | | 21.3 | | 11.4 |
| Level of Service (LOS) | D | F | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 54.3 | D | | 26.4 | C | | 0.0 | | | 16.5 | B | |
| Intersection Delay, s/veh / LOS | 44.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 1.03 | A | | | | F |

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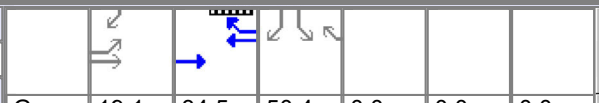
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

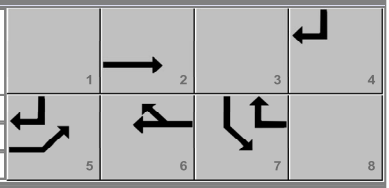


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 204 | | | | 347 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 7.6 | | | | | | | 10.3 |
| Green Extension Time ( *g e* ), s | 0.7 | 0.0 | | 0.0 | | | | 5.3 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

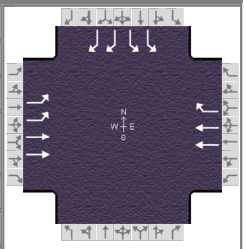
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 219 | | | | 373 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Cycle Queue Clearance Time ( *g c* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.193 | | | | 0.253 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 81 | | | | 153.7 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.2 | | | | 6.1 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 44.8 | 21.1 | | | 36.3 | 5.9 | | | | 22.6 | | 12.0 |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.3 | | | | 22.7 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.7 | C | | 0.0 | | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.15 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

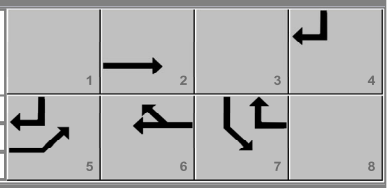
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 209 | | | | 366 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 7.6 | | | | | | | 10.8 |
| Green Extension Time ( $g_e$ ), s | 0.7 | 0.0 | | 0.0 | | | | 5.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

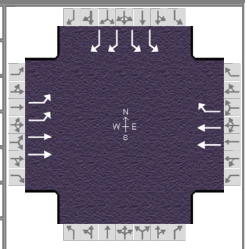
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 225 | | | | 394 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.197 | | | | 0.267 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 83.3 | | | | 163.1 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.3 | | | | 6.5 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.8 | 21.1 | | | 36.3 | 6.0 | | | | 22.7 | | 12.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.4 | | | | 22.9 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.6 | C | | 0.0 | | | 18.0 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.15 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

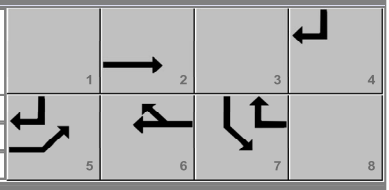
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 124 | 1109 | | | 698 | 227 | | | | 551 | | 321 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 6.0 | | | | | | | 16.1 |
| Green Extension Time ( *g e* ), s | 0.5 | 0.0 | | 0.0 | | | | 7.4 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

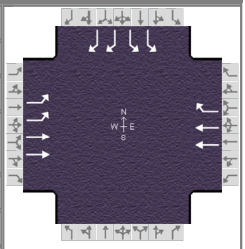
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 133 | 1192 | | | 751 | 244 | | | | 592 | | 345 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 4.0 | 29.7 | | | 22.4 | 6.3 | | | | 14.1 | | 7.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 4.0 | 29.7 | | | 22.4 | 6.3 | | | | 14.1 | | 7.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.238 | 0.665 | | | 0.722 | 0.214 | | | | 0.401 | | 0.209 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 78.7 | 462.5 | | | 392 | 91.9 | | | | 245 | | 97.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 18.5 | | | 15.7 | 3.7 | | | | 9.8 | | 3.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 44.1 | 22.8 | | | 38.4 | 6.1 | | | | 24.3 | | 12.1 |
| Incremental Delay ( *d 2* ), s/veh | 0.3 | 2.0 | | | 4.3 | 0.4 | | | | 0.3 | | 0.1 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 24.7 | | | 42.8 | 6.5 | | | | 24.5 | | 12.2 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 26.7 | C | | 33.9 | C | | 0.0 | | | 20.0 | B | |
| Intersection Delay, s/veh / LOS | 27.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.58 | B | 1.31 | A | | | | F |

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# HCS7 Signalized Intersection Results Summary

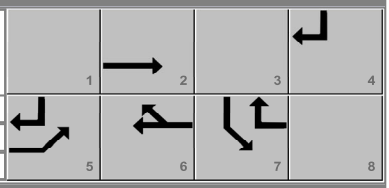
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 124 | 1109 | | | 698 | 232 | | | | 570 | | 321 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 6.0 | | | | | | | 16.7 |
| Green Extension Time ( $g_e$ ), s | 0.5 | 0.0 | | 0.0 | | | | 7.6 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

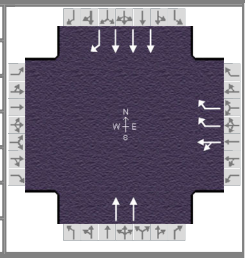
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 133 | 1192 | | | 751 | 249 | | | | 613 | | 345 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 4.0 | 29.7 | | | 22.4 | 6.4 | | | | 14.7 | | 7.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.0 | 29.7 | | | 22.4 | 6.4 | | | | 14.7 | | 7.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.238 | 0.665 | | | 0.722 | 0.219 | | | | 0.415 | | 0.209 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 78.7 | 462.5 | | | 392 | 94.2 | | | | 253.1 | | 97.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 18.5 | | | 15.7 | 3.8 | | | | 10.1 | | 3.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.1 | 22.8 | | | 38.4 | 6.1 | | | | 24.4 | | 12.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 2.0 | | | 4.3 | 0.4 | | | | 0.3 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 24.7 | | | 42.8 | 6.5 | | | | 24.7 | | 12.2 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 26.7 | C | | 33.7 | C | | 0.0 | | | 20.2 | C | |
| Intersection Delay, s/veh / LOS | 26.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.48 | B |
| Bicycle LOS Score / LOS | 1.58 | B | 1.31 | A | | | | F |

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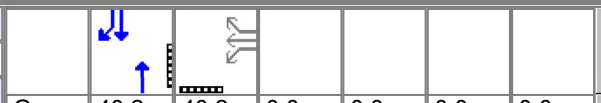
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

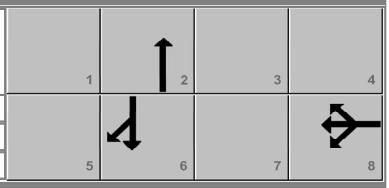


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 109 | 1800 | | 774 | | | 2181 | 196 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( *Y+R c* ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( *g s* ), s | | | | 42.2 | | | | |
| Green Extension Time ( *g e* ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

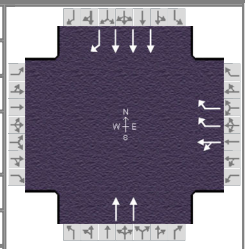
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 293 | 1818 | | 782 | | | 2203 | 198 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( *g s* ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Cycle Queue Clearance Time ( *g c* ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.356 | 1.428 | | 0.484 | | | 0.953 | 0.306 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 167.5 | 1805.5 | | 236.6 | | | 563.5 | 120.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.7 | 72.2 | | 9.5 | | | 22.5 | 4.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.0 |
| Incremental Delay ( *d 2* ), s/veh | | | | | 0.3 | 197.3 | | 1.0 | | | 10.5 | 1.2 |
| Initial Queue Delay ( *d 3* ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.6 | 222.2 | | 18.6 | | | 34.5 | 17.2 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.7 | | F | 18.6 | | B | 33.1 | | C |
| Intersection Delay, s/veh / LOS | 95.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.97 | D | 1.13 | A | 1.81 | B |

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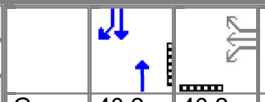
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 115 | 1800 | | 785 | | | 2181 | 210 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

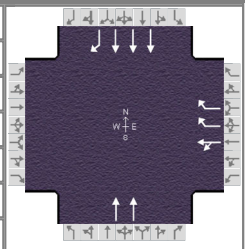
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 299 | 1818 | | 793 | | | 2203 | 212 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1844 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 9.6 | 40.2 | | 14.0 | | | 36.9 | 8.5 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 9.6 | 40.2 | | 14.0 | | | 36.9 | 8.5 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.363 | 1.428 | | 0.491 | | | 0.953 | 0.328 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 171.7 | 1805.5 | | 240.1 | | | 563.5 | 131 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.9 | 72.2 | | 9.6 | | | 22.5 | 5.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.1 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 197.3 | | 1.1 | | | 10.5 | 1.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.7 | 222.2 | | 18.7 | | | 34.5 | 17.5 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.2 | | F | 18.7 | | B | 33.0 | | C |
| Intersection Delay, s/veh / LOS | 94.6 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.98 | D | 1.14 | A | 1.82 | B |

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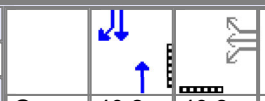
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

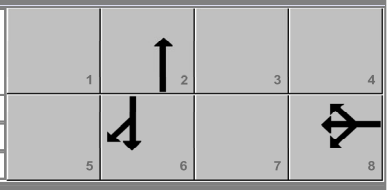


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 201 | 117 | 1915 | | 856 | | | 2366 | 261 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

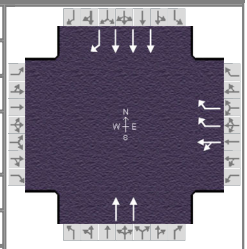
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 321 | 1934 | | 865 | | | 2390 | 264 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1842 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 10.5 | 40.2 | | 15.6 | | | 40.2 | 11.1 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 10.5 | 40.2 | | 15.6 | | | 40.2 | 11.1 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.390 | 1.520 | | 0.535 | | | 1.034 | 0.407 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 187.4 | 2108.3 | | 263.3 | | | 730 | 171.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.5 | 84.3 | | 10.5 | | | 29.2 | 6.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.7 | 24.9 | | 18.1 | | | 24.9 | 16.8 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 237.8 | | 1.3 | | | 28.1 | 1.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 17.0 | 262.7 | | 19.4 | | | 53.0 | 18.7 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 227.7 | | F | 19.4 | | B | 49.6 | | D |
| Intersection Delay, s/veh / LOS | 114.7 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.21 | D | 1.20 | A | 1.95 | B |

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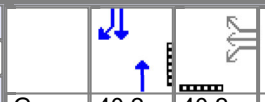
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 201 | 123 | 1915 | | 867 | | | 2366 | 275 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( *Y+R c* ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( *g s* ), s | | | | 42.2 | | | | |
| Green Extension Time ( *g e* ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

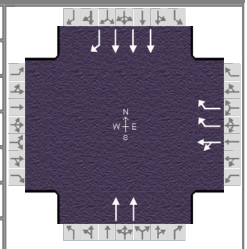
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 327 | 1934 | | 876 | | | 2390 | 278 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( *g s* ), s | | | | | 10.8 | 40.2 | | 15.9 | | | 40.2 | 11.8 |
| Cycle Queue Clearance Time ( *g c* ), s | | | | | 10.8 | 40.2 | | 15.9 | | | 40.2 | 11.8 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.398 | 1.520 | | 0.542 | | | 1.034 | 0.429 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 190.9 | 2108.3 | | 266.9 | | | 730 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.6 | 84.3 | | 10.7 | | | 29.2 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | | | | 16.8 | 24.9 | | 18.2 | | | 24.9 | 17.0 |
| Incremental Delay ( *d 2* ), s/veh | | | | | 0.3 | 237.8 | | 1.3 | | | 28.1 | 2.1 |
| Initial Queue Delay ( *d 3* ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 17.1 | 262.7 | | 19.5 | | | 53.0 | 19.1 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 227.2 | | F | 19.5 | | B | 49.5 | | D |
| Intersection Delay, s/veh / LOS | 114.2 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.22 | D | 1.21 | A | 1.95 | B |

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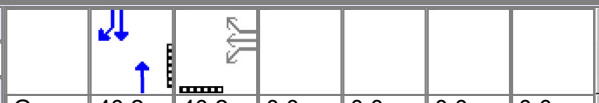
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Oct 14, 2020 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

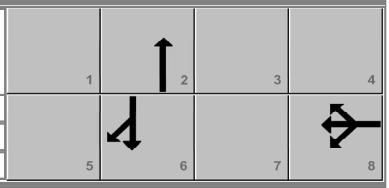


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 350 | 1768 | | 659 | | | 1953 | 198 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( *Y+R c* ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( *g s* ), s | | | | 42.2 | | | | |
| Green Extension Time ( *g e* ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

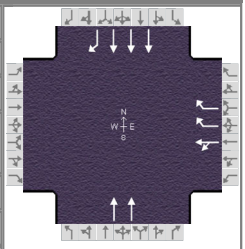
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 570 | 1786 | | 666 | | | 1973 | 200 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( *g s* ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Cycle Queue Clearance Time ( *g c* ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.684 | 1.403 | | 0.412 | | | 0.853 | 0.309 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 353.2 | 1722.2 | | 201.4 | | | 452.1 | 122 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.1 | 68.9 | | 8.1 | | | 18.1 | 4.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | | | | 19.8 | 24.9 | | 16.9 | | | 22.3 | 16.0 |
| Incremental Delay ( *d 2* ), s/veh | | | | | 2.3 | 186.1 | | 0.8 | | | 4.3 | 1.2 |
| Initial Queue Delay ( *d 3* ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.2 | 211.0 | | 17.7 | | | 26.5 | 17.2 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 165.3 | | F | 17.7 | | B | 25.7 | | C |
| Intersection Delay, s/veh / LOS | 88.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.37 | D | 1.04 | A | 1.68 | B |

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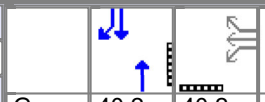
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

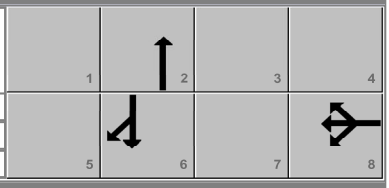


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 358 | 1768 | | 674 | | | 1953 | 217 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

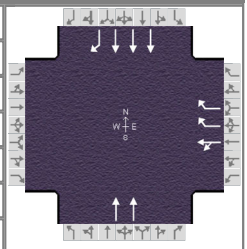
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 578 | 1786 | | 681 | | | 1973 | 219 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 22.4 | 40.2 | | 11.5 | | | 30.7 | 8.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 22.4 | 40.2 | | 11.5 | | | 30.7 | 8.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.694 | 1.403 | | 0.421 | | | 0.853 | 0.339 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 360.3 | 1722.2 | | 205.8 | | | 452.1 | 136.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.4 | 68.9 | | 8.2 | | | 18.1 | 5.4 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.0 | 24.9 | | 17.0 | | | 22.3 | 16.2 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 2.5 | 186.1 | | 0.8 | | | 4.3 | 1.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.5 | 211.0 | | 17.8 | | | 26.5 | 17.7 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 164.9 | | F | 17.8 | | B | 25.6 | | C |
| Intersection Delay, s/veh / LOS | 87.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.39 | D | 1.05 | A | 1.69 | B |

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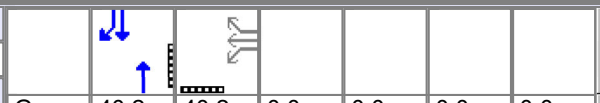
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

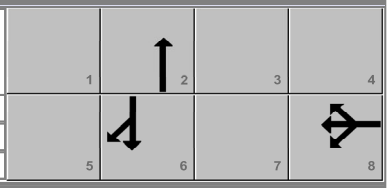


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 252 | 375 | 1960 | | 773 | | | 2140 | 181 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( *Y+R c* ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( *g s* ), s | | | | 42.2 | | | | |
| Green Extension Time ( *g e* ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

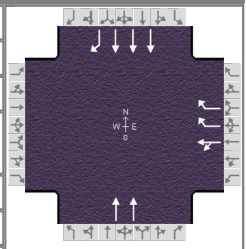
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 633 | 1980 | | 781 | | | 2162 | 183 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1863 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( *g s* ), s | | | | | 25.7 | 40.2 | | 13.7 | | | 35.7 | 7.2 |
| Cycle Queue Clearance Time ( *g c* ), s | | | | | 25.7 | 40.2 | | 13.7 | | | 35.7 | 7.2 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 832 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.761 | 1.555 | | 0.483 | | | 0.935 | 0.282 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 412.8 | 2227.9 | | 236.3 | | | 538.1 | 109.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 16.5 | 89.1 | | 9.5 | | | 21.5 | 4.4 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | | | | 20.9 | 24.9 | | 17.6 | | | 23.7 | 15.8 |
| Incremental Delay ( *d 2* ), s/veh | | | | | 4.2 | 253.7 | | 1.0 | | | 8.6 | 1.1 |
| Initial Queue Delay ( *d 3* ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 25.0 | 278.6 | | 18.6 | | | 32.3 | 16.9 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 217.2 | | F | 18.6 | | B | 31.1 | | C |
| Intersection Delay, s/veh / LOS | 114.1 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.80 | E | 1.13 | A | 1.78 | B |

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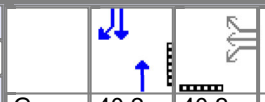
# HCS7 Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Aug 8, 2022 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 252 | 383 | 1960 | | 788 | | | 2140 | 200 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 641 | 1980 | | 796 | | | 2162 | 202 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1863 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 26.1 | 40.2 | | 14.0 | | | 35.7 | 8.1 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 26.1 | 40.2 | | 14.0 | | | 35.7 | 8.1 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 832 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.771 | 1.555 | | 0.493 | | | 0.935 | 0.312 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 420.7 | 2227.9 | | 241.2 | | | 538.1 | 123.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 16.8 | 89.1 | | 9.6 | | | 21.5 | 4.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 21.0 | 24.9 | | 17.7 | | | 23.7 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 4.5 | 253.7 | | 1.1 | | | 8.6 | 1.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 25.5 | 278.6 | | 18.7 | | | 32.3 | 17.3 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 216.7 | | F | 18.7 | | B | 31.0 | | C |
| Intersection Delay, s/veh / LOS | 113.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.47 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.81 | E | 1.14 | A | 1.79 | B |

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FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN22-54260

Date: October 20, 2022

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT ADDENDUM FOR THE PROPOSED REVISED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

On December 18, 2020, the Los Angeles Department of Transportation (LADOT) issued a transportation assessment report to the Department of City Planning (**Attachment 1**) for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC) based on the transportation analyses prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020. However, since the report was released, the project description has been modified: additional restaurant use type, smaller meeting room space, omission of the ballroom, site plan (**Attachment 2**) and later project completion date; addendum transportation analyses dated September 19, 2022 and October 14, 2022 were prepared by LLG: and LADOT published an updated version of the LADOT's Transportation Assessment Guidelines (TAG) dated August 2022.

The current project proposal compares to the original project as follows:

| **Land Use** | **Original Project (2020)** | **Current Project (2022)** |
|---|---|---|
| Hotel | 395 Guestrooms | 395 Guestrooms |
| Quality Restaurant | 12,000 square feet (sf) | 5,950 sf |
| High-Turnover Restaurant | --- | 6,050 sf |
| Spa | 10,000 sf | 9,570 sf |
| Ancillary Ballroom | 5,000 sf | --- |
| Ancillary Meeting Room | 10,000 sf | 3,425 sf |
| Vehicle Parking | 408 new spaces<br>(Total 1,060) | 464 new spaces<br>(Total 1,116) |
| Bicycle Parking | 73 spaces<br>(43 short-term/30 long-term) | 62 spaces<br>(31 short-term/31 long-term) |
| Completion Year | 2025 | 2027 |

The September 19 and October 14, 2022 analyses included updates of the following: related projects, CEQA VMT (Vehicle Miles Travelled) analysis (**Attachment 3**), CEQA Geometric Design Analysis, and Non-

CEQ Project Access and Circulation Review. LADOT concurs with the results of the updated assessments that based on the latest TAG dated August 2022, the project's expected impacts would continue to be less than significant. All of the project requirements that are identified in LADOT's December 18, 2020 letter (**Attachment 1**) shall remain in effect.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

*K:\Letters\2022\CEN22-54260_555 Universal Hollywood_Hilton Hotel Expansion_rev.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Hokchii Chiu, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




o:\0485\dwg\f2-2.dwg 10/28/2020 16:36:46 jshender llg exhibits color.ctb

NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

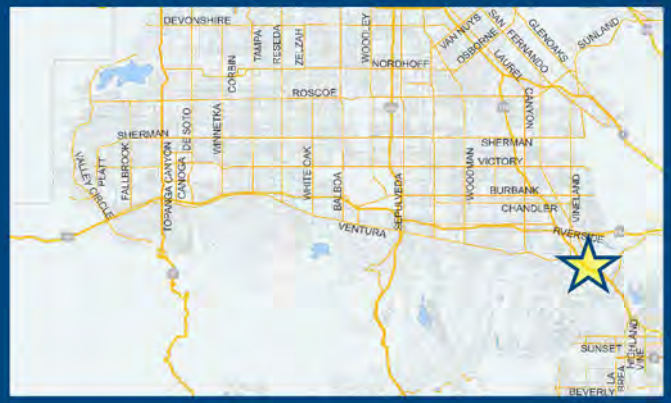
HILTON UNIVERSAL CITY PROJECT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

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

## Project Information

**Project:** Hilton Universal City
**Scenario:** Proposed Project (No TDM)
**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

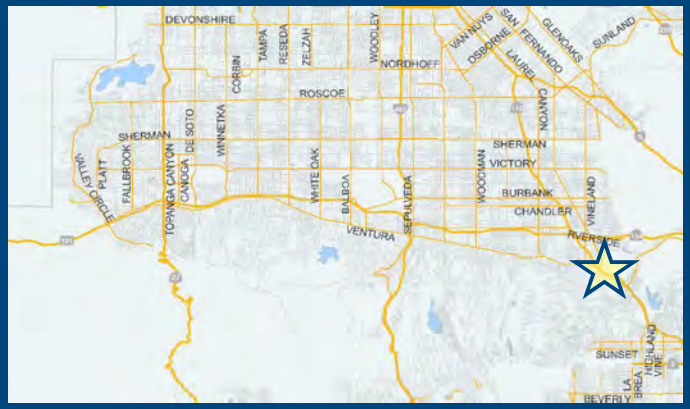
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
- 100 — city code parking provision for the project site
- 74 — actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

**Unbundle Parking**
- 175 — monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

**Parking Cash-Out**
- 50 — percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

**Price Workplace Parking**
- 6.00 — daily parking charge (dollar)
- 50 — percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

**Residential Area Parking Permits**
- 200 — cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# ATTACHMENT C
# CEN18-46906_555 E Universal Hollywood Dr

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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




NOT TO SCALE

SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 2
# PROJECT CONCEPTUAL SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 2 (project site plan).dwg 09/19/2022 13:40:33 jshender llg bw standard-color.ctb

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

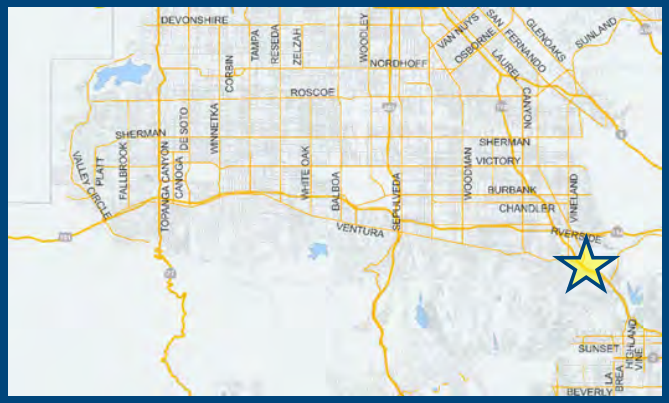
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Quality Restaurant | 5.95 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,421 Daily Vehicle Trips |
| 0 Daily VMT | 30,688 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,421 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 30,688 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 21.570 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

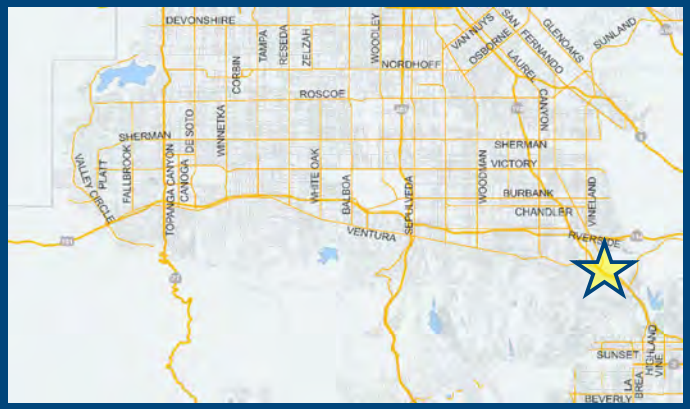
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,421** Daily Vehicle Trips | **4,421** Daily Vehicle Trips |
| **30,688** Daily VMT | **30,688** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

8/3/2022

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 9.570 | ksf |
| | High-Turnover Sit-Down Restaurant | 6.050 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 5.950 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

## Analysis Results

Total Employees: 255
Total Population: 0

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **4,421** | **Daily Vehicle Trips** | **4,421** | **Daily Vehicle Trips** |
| **30,688** | **Daily VMT** | **30,688** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

## Significant VMT Impact?

### APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 652 | -1.5% | 642 | 8.6 | 5,607 | 5,521 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,173 | -11.0% | 2,824 | 6.4 | 20,307 | 18,074 |
| Non-Home Based Other Attraction | 652 | -1.5% | 642 | 7.1 | 4,629 | 4,558 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 642 | 5,521 | 0.0% | 642 | 5,521 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,824 | 18,074 | 0.0% | 2,824 | 18,074 |
| Non-Home Based Other Attraction | 0.0% | 642 | 4,558 | 0.0% | 642 | 4,558 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 255
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# K-4 2023 Transportation Analysis Addendum

# MEMORANDUM

| | | | |
|---|---|---|---|
| To: | Eileen Hunt<br>Los Angeles Department of Transportation | Date: | April 14, 2023 |
| From: | David S. Shender, P.E.<br>Jason A. Shender, AICP<br>Linscott, Law & Greenspan, Engineers | LLG Ref: | 1-22-0593-1 |
| Subject: | **Updated Transportation Analysis Addendum for the Hilton Universal City Project** | | |

LINSCOTT LAW & GREENSPAN
engineers

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Transportation
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Pasadena
Irvine
San Diego

This updated transportation analysis addendum has been prepared by Linscott, Law & Greenspan, Engineers (LLG) as an addendum to the Transportation Assessment for the proposed Hilton Universal City Project ("the Project") located at 555 Universal Hollywood Drive in the Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass Community Plan Area of the City of Los Angeles, California (the "Project Site").

LLG previously prepared a Transportation Assessment dated December 2020 (2020 Approved Transportation Assessment) for a previous design iteration of the Project (2020 Project) based on the *Los Angeles Department of Transportation (LADOT) Transportation Assessment Study Guidelines*, July 2020[1] (2020 TAG). The findings of the 2020 Approved Transportation Assessment were confirmed in the LADOT assessment letter[2] dated December 18, 2020, contained in ***Appendix A***.

In addition, LLG previously prepared a transportation analysis addendum dated October 14, 2022 (2022 Approved Transportation Analysis Addendum) for an updated design of the Project (2022 Project). Additionally, the 2022 Approved Transportation Analysis Addendum provided updates to analyses prepared in the 2020 Transportation Assessment based on the requirements of the updated version of the *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* August 2022[3] (2022 TAG). The findings of the 2022 Approved Transportation Analysis Addendum were confirmed in the LADOT assessment letter[4] dated October 20, 2022, contained in ***Appendix B***.

Subsequent to the preparation of the 2022 Approved Transportation Analysis Addendum, further minor changes to the Project have been proposed. This updated transportation analysis addendum has been prepared to address the following items:

---

[1] *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* LADOT, July 2020.

[2] *Transportation Assessment for the Proposed Hilton Universal City Hotel Expansion Project Located at 555 East Universal Hollywood Drive (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR),* LADOT, December 18, 2020.

[3] *Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines,* LADOT, August 2022.

[4] *Transportation Assessment Addendum for the Proposed Revised Hilton Universal City Hotel Expansion Project Located at 555 East Universal Hollywood Drive (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR),* LADOT, October 18, 2022.

- Minor Change in Project Description. The 2022 Project evaluated in the 2022 Approved Transportation Analysis included 395 hotel guestrooms, 5,950 square feet of quality restaurant floor area, 6,050 square feet of high-turnover restaurant floor area, and 9,570 square feet of spa floor area limited to guests and 250 non-guest members. Additionally, the 2022 Project proposed 3,425 square feet of ancillary meeting room space.

  The restaurant components of the Project have changed, and a bar and lounge area is now proposed on the ground floor. Additionally, the proposed size of the spa component has decreased slightly from 9,570 square feet to approximately 8,630 square feet (i.e., a decrease of 940 square feet from the 2022 Project). Furthermore, the ancillary meeting room space to be added has decreased slightly from 3,425 square feet to approximately 3,400 square feet (i.e., a decrease of 25 square feet from the 2022 Project). This updated transportation analysis addendum evaluates the changes in the trip generation forecast for the Project based on these changes to the Project Description. A comparison of the 2022 Project evaluated in the 2022 Approved Transportation Analysis Addendum and the Project as currently proposed with the design modifications is provided in ***Table 1*** below.

**Table 1**
**Comparison of Land Uses**
**2022 Project vs. Project**

| Land Use | 2022 Project | Project |
|---|---|---|
| Hotel Guestrooms | 395 Guestrooms | 395 Guestrooms |
| Quality Restaurant | 5,950 s.f. | 7,232 s.f [1] |
| High-Turnover Restaurant | 6,050 s.f. | 7,945 s.f. |
| Bar and Lounge | -- | 1,590 s.f. |
| Spa | 9,570 s.f. | 8,630 s.f. |
| Ancillary Meeting Room | 3,425 s.f. | 3,400 s.f. |

[1] Includes 3,244 square feet of non-zoning outdoor seating area.

- Updated CEQA Vehicle Miles Traveled (VMT) Analysis (Threshold T-2.1). The VMT analysis for the Project has been updated based on the modified Project description.

- Updated CEQA Geometric Design Analysis (Threshold T-3). The analysis of queueing at the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard with the addition of Project traffic has been updated based on the Project.

- Updated Non-CEQA Project Access and Circulation Review. In conjunction with the trip generation forecast for the Project, the non-CEQA Project Access and Circulation Review has been updated for "Existing with Project", "Future Cumulative Baseline", and "Future Cumulative with Project" conditions.

  It is noted that as with the 2020 Approved Transportation Assessment, the Existing conditions for this updated transportation analysis addendum are based on the year 2020 since the Notice of Preparation (NOP)[5] for the Project is dated October 6, 2020. The NOP establishes the existing baseline year for preparation of the Draft Environmental Impact Report (DEIR). Furthermore, the approved Transportation Assessment Memorandum of Understanding (MOU) provided in Appendix A of the 2020 Approved Transportation Assessment was approved by LADOT staff on October 14, 2020 and is still valid.

It is further noted that the other analyses (i.e., CEQA Threshold T-1, Non-CEQA Pedestrian, Bicycle, and Transit Access, and Non-CEQA Construction analyses) provided within the 2020 Transportation Assessment are applicable for the Project with design modifications. The results and conclusions of these analyses are unchanged with the Project's design modifications, and therefore do not require revision in conjunction with this addendum.

## Project Description

*Project Site Location*

The Project Site is located at 555 Universal Hollywood Drive in the Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass Community Plan Area of the City of Los Angeles (City). The Project Site is generally bounded by undeveloped parcels and Universal Hollywood Drive to the north, landscaped hillside, a surface parking lot, and W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west. The Project Site location and general vicinity are shown in ***Figure 1***.

[5] *Notice of Preparation of Environmental Impact Report and Public Scoping Meeting for the Hilton Universal City Project (ENV-2017-5424-EIR),* Los Angeles Department of City Planning, October 6, 2020.

The Project Site is located within a High-Quality Transit Area (HQTA) in *Connect SoCal*[6], the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) of the Southern California Association of Governments (SCAG). Specifically, the Project Site is located within one-quarter mile of the Universal/Studio City Station, a Major Transit Stop (MTS), which is served by the Los Angeles County Metropolitan Transit Authority (Metro) B Line (Red Line). Additionally, the Project Site is served by many local transit lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. The transit lines include: Metro Local Lines 155, 222, 224, 240, and the BurbankBus Pink Route. Universal Studios Hollywood also provides a complimentary shuttle service from the existing Hilton Los Angeles/Universal City Hotel (Existing Hotel Building) to Universal Studios Hollywood and Universal CityWalk and a complimentary tram from the Metro B Line (Red Line) Universal City/Studio City Station to the theme park entrances. In addition, a pedestrian bridge over Lankershim Boulevard provides safe and convenient pedestrian access surrounding the Metro B Line (Red Line) Universal City/Studio City Station and the Universal Studios Tram Stop. These aforementioned conditions remain unchanged from the 2022 Project evaluated in the 2022 Approved Transportation Analysis Addendum.

*Existing Project Site*

The Project Site comprises approximately 7.26 acres and is currently developed with the Existing Hotel Building and associated improvements, including ancillary hotel uses (Existing Ancillary Hotel Building). The Existing Hotel Building is a 24-story building with 495 hotel guestrooms, 26,030 square feet of meeting/banquet space, 5,050 square feet of restaurant/lounge area, 8,819 square feet of outdoor pool area, 924 square feet of retail/sundry floor area, and 9,665 square feet of lobby/circulation area. There are currently 652 parking spaces serving the Existing Hotel Building. Access to the Project Site is provided via one driveway along the west side of Universal Hollywood Drive, at the northeasterly portion of the Project Site. These aforementioned conditions remain unchanged from the 2022 Project.

*Project Description*

As proposed and as analyzed in this updated transportation analysis addendum, the Project would improve the Project Site with the addition of an 18-story expansion building (Hotel Expansion Building) to be located just south of the Existing Hotel Building within the southern portion of the Project Site. The Hotel Expansion

[6] *Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments,* Southern California Association of Governments, September 3, 2020.

Building would include up to 395 new hotel guestrooms, approximately 15,177 square feet of restaurant floor area[7], approximately 1,590 square feet of bar and lounge floor area, and approximately 8,630 square feet of spa floor area limited to guests and 250 non-guest members. The proposed restaurants include approximately 6,472 square feet of restaurant space on Level 3 (Level 3 Restaurant), approximately 1,473 square feet of pool food service/bar area (Poolside Restaurant) on the Basement Level, and approximately 7,232 square feet of restaurant and bar space on the rooftop (Rooftop Restaurant).[8] Additionally, the Project would expand the northern portion of the Existing Ancillary Hotel Building to include a one-story meeting room addition (Meeting Room Addition) of approximately 3,400 square feet of ancillary meeting space which would consist of four separate meeting rooms of less than 750 square feet each and a connecting hallway. An additional 464 parking spaces would be added to the Project Site as part of the Project, for a total of 1,116 parking spaces on-site. Construction and occupancy of the Project is proposed to be completed by the year 2027. The conceptual site plan for the Project is illustrated in ***Figure 2***. A comparison of the land uses within the 2022 Project and the Project are summarized in *Table 1*, above.

*Vehicular Project Site Access*

Like the 2022 Project, vehicular access to the Project Site will continue to be provided via the existing driveway along the west side of Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the Project Site. This internal roadway provides vehicle access to the new courtyard adjacent to the Meeting Room Addition (North Plaza), the expanded on-site parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building (South Plaza). The existing Universal Hollywood Drive driveway will continue to accommodate full vehicular access (i.e., left-turn and right-turn ingress and egress movements).

Vehicles entering the Project Site would proceed down the internal roadway to the motorcourt in the South Plaza where hotel guests and visitors would drop-off their vehicles at the existing valet station (V-1) on Level 4, as shown in the Level 4 vehicle circulation plan presented in ***Figure 3*** or proceed to self-park in the expanded parking garage. The South Plaza on Level 4 would continue to serve as the primary drop-off/pick-up location for guests and visitors as well as for rideshare services (e.g., Uber/Lyft). Left turns from the internal roadway into the parking garage would be limited to low traffic volume conditions and would be monitored by traffic control staff. The configuration of the internal roadway would vary depending on traffic demand, with two lanes in and one lane out as the standard operational configuration.

[7] Includes 3,244 square feet of non-zoning outdoor seating area.
[8] Includes 3,244 square feet of non-zoning outdoor seating area.

Stanchions may also be placed to alter this configuration as two lanes out and one lane in depending on traffic demand.

The existing motorcourt in the North Plaza on Level 4 would be reconfigured with a combination of hardscaped and landscaped areas and surface parking and would serve as a loading zone and staging area for activities within the Existing Ancillary Hotel Building. As shown on *Figure 3*, the North Plaza would also include a second valet station 2 (V-2), which would provide an optional valet station for event arrival and/or circulation relief for high traffic volume special events. Circulation within the North Plaza would be one-way. All vehicles exiting the North Plaza would make a northbound right turn onto the internal roadway. Vehicles would be directed to the South Plaza to turn around and turn right into the North Plaza. Similar to the parking garage, left turns from the internal roadway into the North Plaza would be limited to low traffic volume conditions and would be monitored by traffic control staff.

During special events with high arrival volumes, a third valet station (V-3) would be available on Level 3 within the expanded parking garage. The Level 3 vehicle circulation plan is shown in ***Figure 4***. During such special events, no self-parking would be allowed, and vehicles would be directed to one of the three valet stations and managed with traffic control staff to avoid queuing onto Universal Hollywood Drive.

*Pedestrian and Bicycle Project Site Access*

Like the 2022 Project, pedestrian access to the Project Site will continue to be provided via Universal Hollywood Drive. The north side of the existing driveway is improved with sidewalks, and the outbound driveway approach at Universal Hollywood Drive is improved with a striped crosswalk and American with Disabilities Act (ADA) access ramps with yellow truncated domes. Primary pedestrian access to the building on the Project Site will continue to be provided from the South Plaza, which will continue to serve as the pick-up/drop-off area for the complementary Universal Studios Hotel Shuttle. Pedestrian access will also continue to be provided from the parking garage with elevator access. Walkways will be provided around the building perimeters to provide safe pedestrian access through the Project Site to the building entrances.

Bicycle access to the Project Site will continue to be provided via Universal Hollywood Drive. The Project will provide 118 bicycle parking spaces to meet the requirements of the Los Angeles Municipal Code (LAMC). Bicycle parking would be provided on Level 3 (North), Level 4 (South), and Level 4 (North). The 2022 Project included 62 bicycle parking spaces.

*Project Parking*

There are currently 652 parking spaces provided in the Existing Hotel Building's on-site parking garage. To meet the LAMC vehicle parking requirements, the Project will expand the existing three-level parking garage to the north creating one contiguous parking garage, provide overflow surface parking for employees and service vehicles along the existing service road that runs generally along the eastern perimeter of the Project Site, and add new parking spaces along the Project Site's internal roadway and within the North Plaza. The Project will provide a total of 464 new parking spaces. Upon completion of the Project, a total of 1,116 parking spaces will be provided for the Existing Hotel Building and the Project. This is unchanged from the 2022 Project, which also proposed 464 new parking spaces.

*Project Service Area*

Like the 2022 Project, all loading activities will continue to occur off-street and internal to the Project Site. Loading activities associated with service and delivery operations, trash collection and waste management for the Project will occur within the Existing Ancillary Hotel Building, similar to existing conditions. The loading dock will continue to be accessed by the service road along the eastern side of the Existing Hotel Building and Existing Ancillary Hotel Building.

*Project Transportation Demand Management Strategies*

The 2022 Project included four transportation demand management (TDM) strategies to be implemented as Project Design Features. No changes to the TDM strategies described in the 2022 Approved Transportation Analysis Addendum are proposed as part of the Project. The following subsection provides a description of the four TDM strategies to be implemented by the Project as Project Design Features.

The TDM strategies are listed in Table 2.2-2 of the 2022 TAG. The Existing Hotel Building currently implements some of these TDM strategies and will continue to do so upon completion of the Project. Further discussion of the individual TDM strategies is provided in the sections below.

- Transit Subsidies. This TDM strategy involves the subsidization of transit fare for employees of the Project. The subsidy will be proactively offered to each employee at least once annually for a minimum of five years. At the time of initial opening, the Project will offer a daily transit subsidy to all employees of $1.49 per day. This TDM strategy is currently implemented by the Existing Hotel Building and will continue to be upon completion of the Project.

- Promotions and Marketing. The Project will utilize promotional and marketing tools to educate and inform employees about alternative transportation options and the effects of their travel choices. Rather than two-way communication tools or tools that would encourage an individual to consider a different mode of travel at the time the trip is taken (i.e., smartphone application, daily email, etc.), this TDM strategy includes passive educational and promotional materials, such as posters, information boards, or a website with information that employees can choose to read at their own leisure. This TDM strategy is currently implemented by the Existing Hotel Building and will continue to be upon completion of the Project.

- Include Bicycle Parking per Los Angeles Municipal Code. Table 12.21.A.16(a)(2) in the LAMC provides the required short-term and long-term bicycle parking spaces for the Project. The Project will provide the LAMC-required number of short-term and long-term bicycle parking spaces on-site. The short-term bicycle parking ratios are as follows:

    - Hotel (395 guestrooms): 1 space per 10 guestrooms. (40 spaces);
    - Restaurant (11,933 s.f.): 1 space per 2,000 s.f.. (6 spaces);
    - Bar and Lounge (1,590 s.f.): 1 space per 2,000 s.f.. (2 spaces[9]);
    - Spa (8,630 s.f.): 1 space per 2,000 s.f.. (4 spaces); and
    - Meeting Rooms (3,400 s.f.): 1 space per 10,000 s.f.. (2 spaces[10]).

    The long-term bicycle parking ratios are as follows:

    - Hotel (395 guestrooms): 1 space per 10 guestrooms. (40 spaces);
    - Restaurant (11,933 s.f.): 1 space per 2,000 s.f.. (6 spaces);
    - Bar and Lounge (1,590 s.f.): 1 space per 2,000 s.f.. (2 spaces[11]);

[9] While the calculation would yield a requirement of one short-term bicycle parking space, Table 12.21 A.16(a)(2) states that a minimum of two short-term bicycle parking spaces are required for a bar/lounge use.
[10] While the calculation would yield a requirement of one short-term bicycle parking space, Table 12.21 A.16(a)(2) states that a minimum of two short-term bicycle parking spaces are required for all other commercial uses not identified in Table 12.21 A.16(a)(2), including the Project's Meeting Room Addition.

- Spa (8,630 s.f.): 1 space per 2,000 s.f.. (4 spaces); and
- Meeting Rooms (3,400 s.f.): 1 space per 10,000 s.f.. (2 spaces[12]).

Based on the above, the Project is required to provide 54 short-term and 54 long-term bicycle parking spaces per the LAMC, for a total of 108 bicycle parking spaces. The Project will provide 54 short-term bicycle parking spaces and 64 long-term bicycle parking spaces (10 more than required per LAMC) as a Project Design Feature.

- Include Secure Bicycle Parking and Showers. This strategy involves implementation of additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel by providing amenities at destinations. This strategy applies to projects that include bicycle parking on-site per the LAMC. Projects providing long-term bicycle parking secured from the general public in accordance with LAMC Section 12.21A.16(d)(2) and showers in accordance with LAMC Section 91.6307 qualify for this measure.

  As noted above, the long-term bicycle parking secured from the general public in accordance with LAMC Section 12.21A.16(d)(2). In addition, the Existing Hotel Building is improved with end-of-trip bicycle facilities, including lockers and showers, in accordance with LAMC Section 91.6307. Employees of the Project will have access to these existing facilities.

**Updated Project Trip Generation**

The 2022 Approved Transportation Analysis Addendum evaluated a Project including up to 395 hotel guestrooms, 5,950 square feet of quality restaurant floor area, 6,050 square feet of high-turnover restaurant floor area, and 9,570 square feet of spa floor area limited to guests and 250 non-guest members. The weekday AM and PM peak hour trip generation forecast for the Project's prior development program is presented in Table 2 of the 2022 Approved Transportation Analysis Addendum, which was prepared utilizing rates provided in the Institute of Transportation

[11] While the calculation would yield a requirement of one long-term bicycle parking space, Table 12.21 A.16(a)(2) states that a minimum of two long-term bicycle parking spaces are required for a bar/lounge use.

[12] While the calculation would yield a requirement of one long-term bicycle parking space, Table 12.21 A.16(a)(2) states that a minimum of two long-term bicycle parking spaces are required for all other commercial uses not identified in Table 12.21 A.16(a)(2), including the Project's Meeting Room Addition.

Engineers' (ITE) *Trip Generation Manual,* 11th Edition.[13] The daily vehicle trips expected to be generated by the Project were estimated using Version 1.3 of the City's VMT Calculator. Copies of the detailed VMT Calculator worksheets for the 2022 Project are contained in Appendix B of the 2022 Approved Transportation Analysis Addendum.

The trip generation forecast has been revised based on the updated Project design. The following trip generation rates were used to forecast the traffic volumes expected to be generated by the Project:

- Hotel: ITE Land Use Code 310 (Hotel) trip generation average rates were used to forecast the traffic volumes expected to be generated by the hotel component of the Project (including the Project's Meeting Room Addition).

- Rooftop Restaurant: ITE Land Use Code 931 (Fine Dining Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Rooftop Restaurant component of the Project.

- Level 3 and Poolside Restaurants: ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Level 3 Restaurant and the Poolside Restaurant components of the Project.

- Level 4 Bar and Lounge: ITE Land Use Code 975 (Drinking Place) trip generation average rates were used to forecast the traffic volumes expected to be generated by the Level 4 Bar and Lounge component of the Project.

- Spa: ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates were used to forecast the traffic volumes expected to be generated by the spa component of the Project.

In addition to the trip generation forecasts for the Project (which are essentially an estimate of the number of vehicles that are expected to enter and exit the Project Site access points), a forecast was also made of the transit and walk-in trips that will be generated by the Project in lieu of trips by the private automobile. The Project Site is within a HQTA as defined in *Connect SoCal* and is currently served by many local and regional/commuter transit lines via stops located within convenient walking distance along Universal Hollywood Drive and Lankershim Boulevard. These transit lines include: Metro Local Lines 155, 222, 224, and 240, Metro B Line (Red), and the BurbankBus Pink Route. Further discussion of the transit framework is provided in

[13] Institute of Transportation Engineers, *Trip Generation Manual,* 11th Edition, Washington, D.C., 2021.

the Project Site Location subsection herein. The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding land uses, specifically Universal Studios Hollywood and Universal CityWalk, located immediately east of the Project Site. Consistent with the 2022 TAG and approved by LADOT in the Transportation Assessment MOU provided in Appendix A of the 2020 Approved Transportation Assessment, a transit and walk-in adjustment of 25 percent (25%), the maximum reduction permitted per the TAG, has been utilized due to the Project's proximity to nearby transit lines and pedestrian attractors.

Lastly, an internal capture adjustment has been applied for the Project to account for synergistic effects of the planned land use mix. Internal capture trips are those trips made internal to the site between land uses in a mixed or multi-use development, land uses tend to interact, and thus attract a portion of each other's trip generation. An internal capture adjustment of 25% has been utilized to account for the interactions between the hotel and the spa, Level 3 Restaurant, Poolside Restaurant, and Level 4 Bar and Lounge uses. An internal capture adjustment of 15% has been utilized to account for the interactions between the hotel and the Rooftop Restaurant use. A greater internal capture adjustment has been utilized to account for the interactions between the hotel for the spa, Level 3 Restaurant, Poolside Restaurant, and Level 4 Bar and Lounge uses as compared the interactions between the hotel and the Rooftop Restaurant use as the spa, Level 3 Restaurant, Poolside Restaurant, and Level 4 Bar and Lounge uses are expected to be utilized primarily by hotel guests, while the Rooftop Restaurant is expected to be utilized a greater percentage of non-hotel guests when compared to the other uses provided within the Project.

As presented in ***Table 2***, the Project is expected to generate 172 net new vehicle trips (98 inbound trips and 74 outbound trips) during the AM peak hour. During the PM peak hour, the Project is expected to generate 249 net new vehicle trips (144 inbound trips and 105 outbound trips). As presented in *Table 2*, when compared to the 2022 Project, the Project is expected to generate 7 additional vehicle trips during the AM peak hour and 20 additional vehicle trips during the PM peak hour.

The daily vehicle trips expected to be generated by the Project were estimated using Version 1.3 of the City's VMT Calculator. Copies of the detailed VMT Calculator worksheets for the Project are contained in ***Appendix C***. As indicated in the summary VMT Calculator worksheet (Page 2 of *Appendix C*), the Project is forecasted to generate 4,309 daily vehicle trips. It is noted that the Project will incorporate TDM strategies as Project Design Features as described in the Transportation Demand Management subsection herein.

Furthermore, there is no Bar and Lounge land use built within the City's VMT Calculator. Therefore, the VMT Calculator's custom land use feature was utilized to estimate the daily vehicle trips associated with the Project's Bar and Lounge

component (approximately 1,590 square feet). The ITE *Trip Generation Manual* does not provide daily trip rates for ITE Land Use Code 975 (Drinking Place). Therefore, a daily trip generation rate for the Project's Bar and Lounge Component of 122.15 trips/1,000 square feet of floor area was derived based on the proportion of the weekday PM peak hour trip rate to daily trip rate, similar to ITE Land Use Code 931 (i.e., weekday PM peak hour trip rate is 9.3% of the weekday daily trip rate). By applying this applicable rate, the Project's Bar and Lounge component is forecast to generate 194 vehicle trips, which was entered into the VMT Calculator. While a 25% transit/walk-in reduction and a 25% internal capture reduction were applied to the weekday AM and PM peak hour trips generated by the Project's Bar and Lounge component, these reductions were excluded from the daily trip generation forecast, as they are built into the VMT Calculator.

When compared to the 2022 Project evaluated in the 2022 Approved Transportation Analysis Addendum, the Project is expected to generate 424 additional daily vehicle trips. The VMT Calculator worksheets for the 2022 Project evaluated in the 2022 Approved Transportation Analysis Addendum are provided in Appendix B therein.

***Table 3*** below compares the daily trip generation, as well as the net new weekday AM and PM peak hours trips for the 2022 Project and the Project.

**Table 3**
**Trip Generation Comparison**
**2022 Project vs. Project**

| Period | 2022 Project | Project | Net Difference |
|---|---|---|---|
| Daily | 3,885 | 4,309 | 424 |
| Weekday AM Peak Hour | 165 | 172 | 7 |
| Weekday PM Peak Hour | 229 | 249 | 20 |

The general, directional traffic distribution patterns for Project-related trips bound to the Project Site is presented in Figure 2–5 of the 2020 Approved Transportation Assessment. The forecasted net new weekday AM and PM peak hour Project traffic volumes at the study intersections associated with the Project are presented in ***Figures 5*** and ***6***, respectively. The traffic volume assignments presented in *Figures 5* and *6* reflect the traffic distribution characteristics shown in Figure 2–5 of the 2020 Approved Transportation Assessment, and the Project traffic generation forecast presented in *Table 2*.

**Cumulative Development Projects**

*Related Projects*

The transportation analysis prepared in the 2022 Approved Transportation Analysis Addendum utilized related projects lists provided by LADOT and the City of Los Angeles Department of City Planning (LADCP). Per the 2022 TAG, related projects within a radius of one-quarter mile from the farthest outlying study intersection should be included. Therefore, related projects within a 1.15-mile radius (one-quarter mile past the farthest outlying study intersection, Barham Boulevard / W.C. Fields Drive – Cahuenga Boulevard East) of the Project Site were included. The list of related projects in the Project Site area is presented in Table 4 of the 2022 Approved Transportation Analysis Addendum. The location of the related projects is shown in Figure 6 of the 2022 Approved Transportation Analysis Addendum.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the ITE *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in Table 4 of the 2022 Approved Transportation Analysis Addendum. The distribution of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in Figures 7 and 8 of the 2022 Approved Transportation Analysis Addendum, respectively.

*Ambient Traffic Growth*

In order to account for unknown related projects not included in this analysis, the existing traffic volumes were increased at an annual rate of 1.0 percent (1.0%) per year up to and including the year 2027, which is the anticipated year of Project buildout. The ambient growth factor was based on general traffic growth factors provided in the *2010 Congestion Management Program for Los Angeles County*[14] (CMP manual) and determined in consultation with LADOT staff. Based on review of the general traffic growth factors provided in the CMP manual for the Project Site area (Regional Statistical Area [RSA] 13, Burbank, which includes the Project Site), the existing traffic volumes are expected to increase at an annual rate of approximately 0.34% per year between the years 2015 and 2030. Thus, application of an annual growth factor of 1.0% annual growth results in a conservative, worst-case forecast of future traffic volumes in the area as it substantially exceeds the annual traffic growth rate published in the CMP manual. Furthermore, the CMP manual's

[14] *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority, 2010.

traffic growth rate is intended to anticipate future traffic generated by development projects in the Project vicinity.

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

## CEQA ANALYSIS OF TRANSPORTATION IMPACTS

In compliance with the CEQA Guidelines, the 2022 TAG establishes three analyses required for evaluating transportation impacts for land use projects: Conflicting with Plans, Programs, Ordinances, or Policies (Threshold T-1); Causing Substantial Vehicle Miles Traveled (Threshold T-2.1); and Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use (Threshold T-3). These analyses correspond with the transportation analyses required as part of the Project's Environmental Impact Report (EIR). The Threshold T-1 analysis prepared for the 2020 Project within the 2020 Approved Transportation Assessment is applicable to the Project as the minor Project design modifications have no effect on the analysis and conclusions provided therein, and therefore does not require revision. The Threshold T-2.1 and Threshold T-3 analyses have been updated based on the Project.

### VMT Analysis (2022 TAG Threshold T-2.1)

The VMT analysis provided in the 2022 Approved Transportation Analysis Addendum has been updated based on the revised development program. Details of the updated VMT analysis are provided in the following section.

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the CEQA Guidelines in November 2017 and an accompanying technical advisory guidance[15] in April 2018 (*OPR Technical Advisory*) that amends the Appendix G question for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the CEQA Guidelines asking if the project will result in a substantial increase in vehicle miles traveled (VMT). Section 15064.3, subdivision (b)(1) states the following:

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

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

Comprehensive updates to the State CEQA Guidelines were certified and adopted by the California Natural Resources Agency in December 2018. Accordingly, the City adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G question:

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

For land use projects, the intent of this threshold is to assess whether a land use project causes substantial VMT impacts. The City has developed the following screening and impact criteria to address this question. The criteria below are based on the *OPR Technical Advisory* but reflects local considerations.

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

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

For purposes of screening the daily vehicle trips, a proposed project's daily vehicle trips should be estimated using the City's VMT Calculator tool or the most recent edition of the ITE *Trip Generation Manual*. TDM strategies should not be considered for the purposes of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits described in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the 2022 TAG), the daily vehicle trips generated by the existing or qualified terminated land uses can be estimated using the VMT Calculator tool and subtracted from the proposed project's daily vehicle trips to determine the net increase in daily vehicle trips.

    - As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix C*), the Project is forecast to generate a net increase of

4,902 daily vehicle trips. Therefore, the Project exceeds the screening criteria set forth in T-2.1-1.

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

For the purpose of screening the VMT, a project's daily VMT should be estimated using the City's VMT Calculator tool or the City's Travel Demand Forecasting (TDF) model. TDM strategies should not be considered for the purpose of screening. If existing land uses are present on the project site or there were previously terminated land uses that meet the criteria for trip credits description in the trip generation methodology discussion (refer to Subsection 3.3.4.1 of the 2022 TAG), the daily VMT generated by the existing or qualified terminated land uses can be estimated using the City VMT Calculator tool and subtracted from the project's daily VMT to determine the net increase in daily VMT.

  - As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix C*), the Project is forecast to generate 34,132 daily VMT. Therefore, the Project exceeds the screening criteria set forth in T-2.1-2.

In addition to the above screening criteria, the portion of, or the entirety of a project that contains small-scale or local serving retail uses[16] are assumed to have less than significant VMT impacts. If the answer to the following question is no, then that portion of the project meets the screening criteria and a no impact determination can be made for the portion of the project that contains retail uses. However, if the retail uses are part of a larger mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with the above screening criteria. Projects that include retail uses in excess of the screening criteria would need to evaluate the entirety of the project's VMT, as specified in Subsection 2.2.4 of the 2022 TAG.

- If the project includes retail uses, does the portion of the project that contains retail uses exceed a net 50,000 square feet?

  - The Project includes approximately 25,397 square feet of local-serving retail uses, including 7,232 square feet of quality restaurant floor area,[17] 7,945 square feet of high-turnover restaurant floor area, 1,590 square feet of bar/lounge floor area, and 8,630 square feet of spa floor area. Based on the criteria above, these uses are assumed to be local

[16] As noted in the 2022 TAG, the definition of "retail" for this purpose includes restaurant uses.
[17] Includes 3,244 square feet of non-zoning outdoor seating area.

serving. Therefore, a no impact determination can be made for the Project's restaurant, bar/lounge, and spa components.

*Impact Criteria and Methodology*

Per Section 2.2.3 of the 2022 TAG, a development project will have a potential VMT impact if the project meets the following:

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

- For office projects, the project would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

- For regional serving retail projects, the project would result in a net increase in VMT.

- For other land use types, measure VMT impacts for the work trip element using the criteria for office projects above.

Different VMT significance thresholds have been established for each APC boundary area as the characteristics of each are distinct in terms of land use, density, transit availability, employment, etc. The City's significance thresholds (i.e., provided on a daily household VMT per capita basis and a daily work VMT per employee basis) for each of the seven APC boundary areas are presented in Table 5 of the 2022 Approved Transportation Analysis Addendum. As the Project Site is located within the South Valley APC, the VMT impact criteria (i.e., 15% below the APC average) applicable to the Project is 11.6 Daily Work VMT per Employee.

Section 2.2.4 of the 2022 TAG provides screening criteria and thresholds of significance used to determine other types of land uses occasionally reviewed by LADOT (including hotel projects) would result in significant impacts as it relates to VMT:

- Hotel and Motel Uses. VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips, and apply a separate impact threshold to each trip type. The employee trips should be treated as similar to those for office uses where the hotel/motel project would result in an impact if it generates work VMT per employee exceeding 15%

below the existing average work VMT per employee for the APC in which the project is located.

To evaluate the potential VMT impacts of visitor/guest trips, the analysis should screen out visitor/guest trips from a quantitative analysis where those hotels/motels would be considered to meet a localized demand for visitor/guest travel. Hotel and motel uses could be shown to not contribute to significant visitor/guest trips if they are proposed in locations that are closer to common or desired destinations for guests and visitors than other existing hotel and motel uses, and therefore result in shorter overall visitor trips that are expected without the project. The conclusion that hotel and motel uses would not result in a significant VMT impact from visitor/guest trips would be more substantiated where the hotel/motel project includes TDM measures that actively promote transit and bike share services to the hotel/motel patrons.

Where it cannot be qualitatively demonstrated that hotel and motel uses would not result in lower guest/visitor trip distances as compared to without the project, the analysis should quantify the VMT of visitor/guest trips and either evaluate if the visitor/guest trips would lead to a net increase in daily VMT of those trips as compared to without the project or, if technically feasible, would generate VMT per visitor/guest that exceed 15% below the existing average citywide VMT per visitor/guest.

The impact methodology set forth in the TAG for a hotel/mixed-use project such as the Project is as follows:

- Mixed-Use Projects. The project VMT impact should be considered significant if any one (or all) of the project land uses exceed the impact criteria for that particular land use, taking credit for internal capture. In such cases, mitigation options that reduce the VMT generated by any or all of the land uses could be considered.

- Hotel and Motel Uses. VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips, and apply a separate impact threshold to each trip type. The employee trips should be treated as similar to those for office uses where the hotel/motel project would result in an impact if it generates work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC in which the project is located.

Where it cannot be qualitatively demonstrated that hotel and motel uses would not result in lower guest/visitor trip distances as compared to without the project, the

analysis should quantify the VMT of visitor/guest trips and either evaluate if the visitor/guest trips would lead to a net increase in daily VMT of those trips as compared to without the project or, if technically feasible, would generate VMT per visitor/guest that exceed 15% below the existing average citywide VMT per visitor/guest.

*Summary of Project VMT Analysis*

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

- As described in the Project Transportation Demand Management subsection herein, the Project will commit to including four strategies to be implemented as Project Design Features. The TDM strategies include: Transit Subsidies; Promotions and Marketing; Include Bicycle Parking per the LAMC; and Include Secure Bicycle Parking and Showers. It is noted that the Existing Hotel Building currently provides transit subsidies and provides promotional and marketing materials in an effort to reduce single-occupant vehicle trips and will continue to do so upon completion of the Project.

- The Project, with the inclusion of the Project Design Features, is estimated to generate a total of 4,309 daily vehicle trips.

- The estimated Daily Work VMT per Employee for the Project is 8.8 Daily Work VMT per Employee, which is less than the South Valley APC Daily Work VMT per Employee significance threshold of 11.6 Daily Work VMT per Employee. As the estimated Daily Work VMT per Employee is less than the South Valley APC's significance threshold for Daily Work VMT per Employee, employee trips associated with the Project's hotel component would therefore result in a "less than significant" VMT impact.

- Per the 2022 TAG, the Project's quality restaurant, high-turnover restaurant, bar/lounge, and spa components, which total 25,397 square feet of floor area, are considered local-serving retail uses. As the Project's local-serving retail uses total less than 50,000 square feet, a no impact determination can be made as it relates to VMT for these uses.

- Per the 2022 TAG, hotel uses such as the Project could be shown to not contribute to significant visitor/guest trips if they are proposed in locations

that are closer to common or desired destinations for guests and visitors than other existing hotel uses, and therefore result in shorter overall visitor trips that are expected without the Project. The Project proposes to add 395 guestrooms across Universal Hollywood Drive from Universal Studios Hollywood and Universal CityWalk. The Existing Hotel Building is the closest hotel to the main entrance of Universal Studios Hollywood and Universal CityWalk. The only other hotel use within a similar proximity to these destinations is the Sheraton Universal, which abuts the Project Site to the west.

Given the Project's location relative to Universal Studios Hollywood and Universal CityWalk, it is assumed that many hotel visitors/guests will walk between these destinations and the Project Site. These walking trips will potentially replace current vehicle trips to these destinations by the visitors staying at off-site hotels. Additionally, the Existing Hotel Building provides a complimentary shuttle service which transports visitors and guests to and from Universal Studios Hollywood and Universal CityWalk, which will be available to future visitors and guests of the Project, thereby further reducing vehicle trips. Furthermore, the Project will provide bicycle parking facilities for visitors and guests per the requirements of the LAMC. As the Project will add 395 additional guestrooms within the direct vicinity of Universal Studios Hollywood and Universal CityWalk, will provide a complimentary shuttle transporting guests to and from these destinations, and will provide bicycle parking amenities, it is concluded that the Project will not contribute to significant visitor/guest trips, and therefore results in a "less than significant" VMT impact.

Per direction from LADCP, TDM strategies may only be considered as Project Design Features if the VMT impact without consideration of these strategies is less than significant. Accordingly, the daily vehicle trips and VMT expected to be generated by the Project without consideration of TDM strategies were also calculated using Version 1.3 of the City's VMT Calculator tool. Copies of the detailed City of Los Angeles VMT Calculator worksheets for the proposed Project are contained in ***Appendix D***. As indicated in the summary VMT Calculator worksheet, the Project, without consideration of TDM strategies, is forecasted to generate the following:

- The Project would be estimated to generate a total of 4,902 daily vehicle trips.

- The estimated Daily Work VMT per Employee for the Project would be 10.0 Daily Work VMT per Employee, which is less than the South Valley APC significance threshold of 11.6 Daily Work VMT per Employee.

Based on the above, the Project would not have a significant VMT without consideration of the TDM strategies described in the Transportation Demand Management subsection herein. The Project Design Features would further reduce the Daily Work VMT per Employee expected to be generated by the Project. Thus, based on the above analyses, the Project would not result in a significant VMT impact. Therefore, no mitigation is necessary as it relates to VMT.

*Summary of Cumulative VMT Analysis*

As stated in the 2022 TAG, analyses should consider both short-term and long-term project effects on VMT. Short-term effects are evaluated in the detailed Project-level VMT analysis summarized above. Long-term, or cumulative, effects are determined through a consistency check with the Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, projects that are consistent with this plan in terms of development, location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, as noted in the 2022 TAG, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per employee) in the analysis, a less than significant project impact conclusion is sufficient in demonstrating there is no cumulative VMT impact. Projects that fall under the City's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

Based on the above Project-related VMT analysis and the conclusions reported above (i.e., which conclude that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), the Project's contribution to a cumulative VMT impact would not be cumulatively considerable, and therefore, the Project's transportation impacts related to VMT would be less than significant.

**Geometric Design (Threshold T-3)**

The Geometric Design analysis provided in the 2022 Approved Transportation Analysis Addendum has been updated based on the Project description. Details of the updated geometric design analysis are provided in the following section.

As stated in the 2022 TAG (refer to Section 2.4.1 thereof), impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the project site, and may include safety, operational, or capacity impacts. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. Evaluation of access impacts require details relative to project land use, size, design, location of access points, etc. These impacts are typically evaluated for permanent conditions after project completion but can also be evaluated for temporary conditions during project construction.

Project access can be analyzed in qualitative and/or quantitative terms, and in conjunction with the review of internal site circulation and access to parking areas. All proposed site access points should be evaluated.

Conversely, vehicle/vehicle conflicts may be created if the land use project would generate substantial demand that would result in additional vehicle queues on to a freeway off-ramp that would further lead to unsafe differentials of travel speed between cars attempting to exit and cars traveling at higher speeds. The potential for freeway safety impacts can be analyzed quantitatively by simulation models and collecting information on existing prevailing travel speeds pursuant to the methodology described below.

*Screening Criteria*

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

- Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?
    - No, the Project proposes to utilize the existing driveway currently serving the Project Site.
- Is the project proposing to, or required to make any voluntary or required modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.)?

As stated in the 2022 TAG (refer to Section 2.4.1 thereof), for the purpose of the screening for projects that are making physical changes to the public right-of-way, determine the street designation and improvement standard for any project frontage along streets classified as an Avenue or Boulevard (as designated in the City's General Plan) using the Mobility Plan 2035, or NavigateLA, an online portal managed by the City's Bureau of Engineering (BOE). If any street fronting the project site is an Avenue or Boulevard and it is determined that additional dedication, or physical modifications to the public right-of-way are proposed or required, the answer to this question is yes. For projects not subject to dedication and improvement requirements under the LAMC, though the project does propose dedications or physical modifications to the public right-of-way, which may also include new physical modifications along streets classified as either Collectors or Locals, the answer to this question is yes. Based on a review of the Project, the following answer is provided:

- No, the Project is not proposing or required to make any modifications to the public right-of-way.

As the answer is "no" to both screening criteria questions, no further analysis is required to assess whether the Project would result in impacts due to geometric design hazards or incompatible uses. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, and the Project's impact would be less than significant.

In addition, the screening questions above, if the answer is "yes" to all the following questions, further analysis will be required to assess whether the project would result in impacts due to queueing from a freeway off-ramp that could lead to unsafe differential travel speeds:

- Does the land use project involve a discretionary action that would be under review by LADCP?
  - Yes, the Project involves a discretionary action that would be reviewed by LADCP.
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
  - Yes, the Project will generate a net increase of 250 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT

Calculator (Page 1 of *Appendix C*), the Project will generate 4,902[18] net new daily vehicle trips.

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

    - Yes, as shown in *Figures 5* and *6*, the Project would add 29 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour. As shown in *Figures 5* and *6*, the Project would not add 25 or more trips during the weekday AM and PM peak hours at other freeway off-ramps in the immediate vicinity of the Project Site.

Per the 2022 TAG, if Project traffic is expected to cause or add to a queue extending onto the freeway mainline by less than two car lengths, the Project would cause a less than significant safety impact. The analysis was prepared based on the *Highway Capacity Manual*[19] (HCM) operational analysis methodology pursuant to the 2022 TAG. The analysis was prepared utilizing the *HCS 2023* software package, which implements the HCM operational methods. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS 2023* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to the Updated Project Trip Generation Subsection Provided Herein

- Project Trip Distribution and Assignment: Refer to the Updated Project Trip Generation Subsection Provided Herein, as well as Subsection 2.9.2 of the 2020 Approved Transportation Assessment

- Existing Vehicle Network: Refer to Subsection 3.3 of the 2020 Approved Transportation Assessment

- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4 of the 2020 Approved Transportation Assessment

[18] For screening purposes, the number of daily vehicle trips without reductions from implementation of TDM strategies are reported.
[19] *Highway Capacity Manual 7th Edition,* Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2022.

- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to the Related Projects and Ambient Traffic Growth Discussions Provided herein, as well as the 2022 Approved Transportation Analysis Addendum

The operational analysis of vehicle queuing at the off-ramp was prepared for the following conditions:

(a) Existing (2020) conditions.[20]

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2027 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(d) Condition (c) with completion and occupancy of the Project.

Pursuant to the 2022 TAG, the HCM methodology for signalized unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the 95$^{th}$ percentile queues (in feet) for all approaches for the off-ramp intersection. The 95$^{th}$ percentile queue is the maximum back of queue with 95$^{th}$ percentile traffic volumes. The HCM 7$^{th}$ Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.

The assessment of the off-ramps includes a review of the vehicle queue length as compared to the total available queueing capacity of the ramp to determine whether the vehicle queue would extend beyond the length of the ramp onto the mainline. To this end, the queueing analysis looks at two separate components of the ramp capacity: the length of each approach lane to the intersection, and the remaining length of the ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline. The queue may exceed the striped length of a given approach lane, as long as there is sufficient additional queueing capacity on the ramp, it will not spill over onto the mainline.

The summary of the operational analysis of the off-ramp intersection is provided in ***Table 4***. The HCM methodology worksheets for the analyzed off-ramp are contained in ***Appendix E***.

[20] Existing conditions based on year 2020 per NOP and approved Transportation Assessment MOU, both of which are dated 2020.

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3–6 and 3–7 of the 2020 Approved Transportation Assessment, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 7*** and ***8***, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in Figures 11 and 12 of the 2022 Approved Transportation Analysis Addendum, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9*** and ***10***, respectively.

As shown in *Table 4*, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project conditions increases by 27.0 feet (i.e., just greater than one vehicle length) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. Furthermore, the vehicle queue will not extend onto the mainline. Therefore, the Project would cause a less than significant freeway safety impact.

**NON-CEQA TRANSPORTATION ANALYSIS**

As stated in the 2022 TAG, the authority for requiring non-CEQA transportation analysis and potentially requiring improvements to address identified deficiencies lies in the City's Site Plan Review authority as established in LAMC Section 16.05. As provided in Section 16.05:

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

Additional authority for preparing a non-CEQA transportation analysis is found in other City ordinances, such as certain transportation specific plans. The impacts, also referred to as deficiencies, discussed in the 2022 TAG are not intended to be

interpreted as thresholds of significance, or significance criteria for purposes of CEQA review unless otherwise specifically identified.

**Non-CEQA Project Access and Circulation Evaluation**

The non-CEQA Project access and circulation analysis provided in the 2022 Approved Transportation Analysis Addendum has been updated based on the updated Project description and corresponding trip generation forecast. Details of the updated Project access and circulation analysis are provided in the following section.

Project access and circulation constraints relate to the provision of access to and from the Project Site, and may include safety, operational, or capacity constraints. Constraints can be related to vehicular/vehicular, vehicular/bicycle, or vehicular/pedestrian constraints as well as to operational delays. These conflicts may be created by the driveway configuration or through the placement of Project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to an intersection or crosswalk. The Project access and circulation has been evaluated for permanent conditions after Project completion.

***Table 5*** summarizes the vehicle queuing analysis prepared for each of the study locations for the representative intersection traffic movements for the weekday AM and PM peak hours. *Appendix E* contains the analysis data worksheets for the study intersections.

*Screening Criteria*

- Does the land use project involve a discretionary action that would be under review by LADCP?
    - Yes, the Project involves a discretionary action that would be reviewed by LADCP.
- Would the land use project generate a net increase of 500 or more daily vehicle trips?
    - Yes, the Project will generate a net increase of 500 or more daily vehicle trips. As indicated on the Screening Tab of the City's VMT Calculator (Page 1 of *Appendix C*), the Project will generate 4,902 net new daily vehicle trips.[21]

[21] For screening purposes, the number of daily vehicle trips without reductions from implementation of TDM strategies are reported.

As the answer is "yes" to both of the screening criteria questions (i.e., the Project will require a discretionary action and the Project will generate more than 500 daily trips), further analysis is required to evaluate Project access, safety and circulation.

*Evaluation Criteria*

For operational evaluation of land use projects, the 2022 TAG requires a quantitative evaluation of the Project's expected access and circulation operations. Project access is considered constrained if the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard (as designated in the Mobility Plan 2035) at Project driveway(s) or would cause or substantially extend queuing at nearby signalized intersections. Unacceptable or extended queuing may be defined as follows:

- Additional queue along through lanes and either of the following conditions are expected:
    - The projected peak hour intersection Level of Service (LOS) is D and the through lane queue increases by greater than 75 feet on any approach with the directional approach LOS at E or F, or
    - The projected peak hour intersection LOS is E or F and the through lane queue increases by greater than 50 feet on any approach with the directional approach LOS at E or F.
- Spill over from turn pockets into through lanes.
- Block cross streets or alleys.
- Contribute to gridlock congestion. For the purposes of this section, "gridlock" is defined as the condition where traffic queues between closely spaced intersections and impedes the flow of traffic through upstream intersections.

The 2022 TAG acknowledges that demand for curbside space has substantially increased due to the continued expansion of driver-for-hire transportation network companies (TNCs) and shared mobility services. As such, the 2022 TAG states that a Transportation Assessment should characterize the on-site loading demand of the project frontage and answer the following questions:

- Would the project result in passenger loading demand that could not be accommodated within any proposed on-site passenger loading facility?

- No, as discussed in the Vehicular Project Site Access subsection herein, all passenger loading and unloading will occur off-street and internal to the Project Site. Any curbside loading/unloading along the Project Site's frontage along Universal Hollywood Drive is strictly prohibited and will continue to be so with the Project.

- Would accommodating the passenger loading demand create pedestrian or bicycle conflicts? Which curbside management options should be explored to better address passenger loading needs in the public right-of-way?

    - No pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur. All loading/unloading activities associated with the Existing Hotel and the Project will occur off-street and internal to the Project Site.

*Operational and Passenger Loading Evaluation Methodology*

Based on coordination with LADOT staff and as presented in the Transportation Assessment MOU provided in Appendix A of the 2020 Approved Transportation Assessment, the following 11 study intersections were identified for operational evaluation of whether the Project's traffic would contribute to unacceptable queuing on an Avenue or Boulevard:

1. US-101 Freeway Northbound Ramps / Campo de Cahuenga Way
2. MTA Driveway / Campo de Cahuenga Way
3. Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive
4. Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp
5. Lankershim Boulevard / Ventura Boulevard – Cahuenga Boulevard
6. US-101 Freeway Southbound Ramps – Regal Place / Cahuenga Boulevard
7. Universal Hollywood Drive / Hilton Driveway
8. Universal Studios Boulevard / W.C. Fields Drive
9. Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp

10. Universal Studios Boulevard / Cahuenga Boulevard West

11. Barham Boulevard / W. C. Fields Drive – Cahuenga Boulevard West

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

Per the 2022 TAG, if Project traffic is expected to cause or add to a queue extending onto the freeway mainline by less than two car lengths, the Project would cause a less than significant safety impact. The analysis was prepared based on the HCM operational analysis methodology pursuant to the 2022 TAG. The analysis was prepared utilizing the *HCS 2023* software package, which implements the HCM operational methods. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded in the *HCS 2023* software. The operational analysis was prepared utilizing the following data previously presented herein:

- Project Peak Hour Traffic Generation: Refer to the Updated Project Trip Generation Subsection Provided Herein

- Project Trip Distribution and Assignment: Refer to the Updated Project Trip Generation Subsection Provided Herein, as well as Subsection 2.9.2 of the 2020 Approved Transportation Assessment

- Existing Vehicle Network: Refer to Subsection 3.3 of the 2020 Approved Transportation Assessment

- Existing Weekday AM and PM Hour Traffic Count Data: Refer to Subsection 3.4 of the 2020 Approved Transportation Assessment

- Related Projects (i.e., within a 1.15-mile radius) and Ambient Traffic Growth: Refer to the Related Projects and Ambient Traffic Growth Discussions Provided herein, as well as the 2022 Approved Transportation Analysis Addendum

The operational analysis of vehicle queuing at the off-ramp was prepared for the following conditions:

(a) Existing (2020) conditions.

(b) Condition (a) with completion and occupancy of the Project.

(c) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2027 and with completion and occupancy of the related projects (i.e., future cumulative baseline).

(d) Condition (c) with completion and occupancy of the Project.

Pursuant to the 2022 TAG, the HCM methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing. The operation analysis reports the control delay (in seconds), LOS, and 95$^{th}$ percentile queues (in feet) for all approaches for the signalized intersections and the minor street approaches for the unsignalized intersections. The 95$^{th}$ percentile queue is the maximum back of queue with 95$^{th}$ percentile traffic volumes. The HCM 7$^{th}$ Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet. The summary of the operational analysis of the study intersections is provided in *Table 5*. The HCM methodology worksheets for the analyzed intersections are contained in *Appendix E.*

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in Figures 3–6 and 3–7 of the 2020 Approved Transportation Assessment, respectively. The "Existing with Project" traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 7* and *8*, respectively. The "Future Cumulative Baseline" (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in Figures 11 and 12 of the 2022 Approved Transportation Analysis Addendum, respectively. The "Future Cumulative with Project" (existing, ambient growth, related projects, and Project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in *Figures 9* and *10*, respectively.

As presented in *Table 5*, the Project would not cause or substantially extend vehicle queuing at eight of the 11 study intersections during the weekday AM and PM peak hours. At these intersections, the change in queue length associated with the Project ranges from no increase in queue length to a maximum of 52.5 feet (i.e., approximately two vehicles). Additionally, the change in through lane queue length associated with the Project ranges from no increase to a maximum of 36.2 feet (i.e., less than two vehicles). The Project would result in unacceptable queuing and/or operational deficiencies at the following intersections:

- Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive (Study Int. No. 3)

    - The change in queue length associated with the Project at the westbound Universal Hollywood Drive right-turn approach under Future Cumulative with Project conditions increases by 137.0 feet (i.e., more than five vehicles) during the weekday PM peak hour. It is noted that Universal Hollywood Drive is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Additionally, as this intersection is completely built out, no physical modifications or improvements to the public right-of-way are feasible.

- Universal Studios Boulevard / W.C. Fields Drive (Study Int. No. 8)

    - The change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach under Future Cumulative with Project conditions increases by 204.1 feet (i.e., more than eight vehicles) during the weekday PM peak hour. It is noted that west of Universal Studios Boulevard, W.C. Fields Drive is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Furthermore, the extended queues would not spill over into an adjacent through lane, nor would queues block any existing driveways.

- Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Study Int. No. 9)

    - The change in queue length associated with the Project at the southbound Universal Studios Boulevard left-turn approach under Future Cumulative with Project conditions increases by 111.7 feet (i.e., more than four vehicles) during the weekday PM peak hour. It is noted that Universal Studios Boulevard is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard.

All passenger loading/unloading will occur within the Project's designated on-site drop-off and pick-up areas, therefore, no pedestrian or bicycle conflicts due to potential loading/unloading activities are anticipated to occur.

**Conclusions**

The conclusions of this updated transportation analysis addendum for the Project are as follows:

- ***Project Description*** – The 2022 Project evaluated in the 2022 Approved Transportation Analysis Addendum has been revised. As proposed, the Project would improve the Project Site with the addition of the 18-story Hotel Expansion Building just south of the Existing Hotel Building within the southern portion of the Project Site. The Hotel Expansion Building would include up to 395 hotel guestrooms, approximately 15,177 square feet of restaurant floor area,[22] approximately 1,590 square feet of bar and lounge floor area, and approximately 8,630 square feet of spa floor area limited to guests and 250 non-guest members. The proposed restaurants include approximately 6,472 square feet of restaurant space on Level 3, approximately 1,473 square feet of poolside food service/bar area, and approximately 7,232 square feet of restaurant and bar space on the rooftop.[23] Additionally, the Project would expand the northern portion of the Existing Ancillary Hotel Building to include a one-story Meeting Room Addition of approximately 3,400 square feet of ancillary meeting space which would consist of four separate meeting rooms of less than 750 square feet each and a connecting hallway. An additional 464 parking spaces would be added to the Project Site as part of the Project, for a total of 1,116 parking spaces on-site. Construction and occupancy of the Project is proposed to be completed by the year 2027.

- ***Project Trip Generation*** – The Project is expected to generate 172 vehicle trips (98 inbound trips and 74 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the Project is expected to generate 249 vehicle trips (144 inbound trips and 105 outbound trips). The Project is expected to generate 4,309 daily vehicle trips.

- ***CEQA Transportation Analysis***

    - *VMT Analysis (2022 TAG Threshold T-2.1)* – The VMT analysis provided in the 2022 Transportation Analysis Addendum has been updated based on the revised Project design. The Project as designed, with the inclusion of four TDM strategies as Project Design Features outlined in the Transportation Demand Management subsection herein, will not result in a significant VMT impact. Furthermore, based on those TDM strategies, as well as the Project-related VMT analysis and

[22] Includes 3,244 square feet of non-zoning outdoor seating area.
[23] See Footnote 22.

the conclusions discussed in the VMT analysis section provided herein (which demonstrate that the Project falls under the City's efficiency-based impact thresholds and thus are already shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS), no cumulatively significant VMT impacts are anticipated.

Per LADOT's 2022 TAG, VMT impacts of hotel and motel uses should evaluate the VMT impacts of both employee trips and visitor/guest trips. The assessment of visitor/guest trips can be completed on a qualitative basis. Given the Project's location relative to Universal Studios Hollywood and Universal CityWalk, it is assumed that many hotel visitors/guests will walk between these destinations and the Project Site. These walking trips will potentially replace current vehicle trips to these destinations by the visitors staying at off-site hotels. Additionally, the Existing Hotel Building provides a complimentary shuttle service which transports visitors and guests to and from Universal Studios Hollywood and Universal CityWalk, which will be available to future visitors and guests of the Project, thereby further reducing vehicle trips. Furthermore, the Project will provide 118 bicycle parking spaces for visitors and guests per the LAMC requirements. As the Project will add 395 additional guestrooms within the direct vicinity of Universal Studios Hollywood and Universal CityWalk, will provide a shuttle transporting guests to and from these destinations, and will provide bicycle parking amenities, it is concluded that the Project will not contribute to significant visitor/guest trips, and therefore results in a "less than significant" VMT impact.

- *Geometric Design Review (2022 TAG Threshold T-3)* – Given that the Project would not involve any modification of the current access point to the Project Site from the public right-of-way and based on a review of the forecast net new weekday AM and PM peak hour Project traffic volumes, and the existing physical condition of the Project Site, no safety concerns related to geometric design are noted. Therefore, it can be determined that the Project will not substantially increase hazards due to a geometric design feature or incompatible use, resulting in a less than significant impact determination.

  While the Project will add more than 25 trips to the US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard (Study Int. No. 6) during the weekday PM peak hour, the change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp right-turn approach under Future Cumulative with Project

conditions increases by 27.0 feet (i.e., just over one vehicle) during the weekday PM peak hour. There is no change in queue length associated with the Project at the US-101 Freeway Southbound Off-Ramp's left-turn and through approaches. As the change in queue length at the US-101 Freeway Southbound Off-Ramp right-turn approach would be less than the City's threshold of two vehicles, the Project would cause a less than significant freeway safety impact.

- ***Non-CEQA Transportation Analysis***

  - *Project Access and Circulation Review* – The Project's weekday AM and PM peak hour traffic volumes would not cause or substantially extend vehicle queuing at eight of the 11 study intersections analyzed. The Lankershim Boulevard / Campo de Cahuenga Way – Universal Hollywood Drive intersection (Study Int. No. 3) is completely built out, therefore no physical modifications or improvements to the public right-of-way are feasible. While the change in queue length associated with the Project at the eastbound W.C. Fields Drive right-turn approach at Universal Studios Boulevard (Study Int. No. 8) under Future Cumulative with Project conditions increases by more than eight vehicles during the weekday PM peak hour, it is noted that west of Universal Studios Boulevard, W.C. Fields Drive is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan, and the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Furthermore, the extended queues would not spill over into an adjacent through lane, nor would queues block any existing driveways. Therefore, no physical modifications or improvements to the public right-of-way would be required. Similarly, at the Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp intersection (Study Int. No 9), while the change in queue length associated with the Project at the southbound Universal Studios Boulevard approach under Future Cumulative with Project conditions increases by more than four vehicles during the weekday PM peak hour, it is noted that this section of Universal Studios Boulevard is designated as a Private Street under the Mobility Plan 2035 Street Standards Plan. Therefore, the change in queue associated with the Project would not contribute to unacceptable queuing on an Avenue or Boulevard. Therefore, no physical modifications or improvements to the public right-of-way would be required.




N

NOT TO SCALE

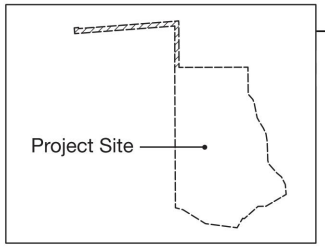
MAP SOURCE: GOOGLE MAPS
★ PROJECT SITE
Ⓧ STUDY INTERSECTION

# FIGURE 1
# VICINITY MAP

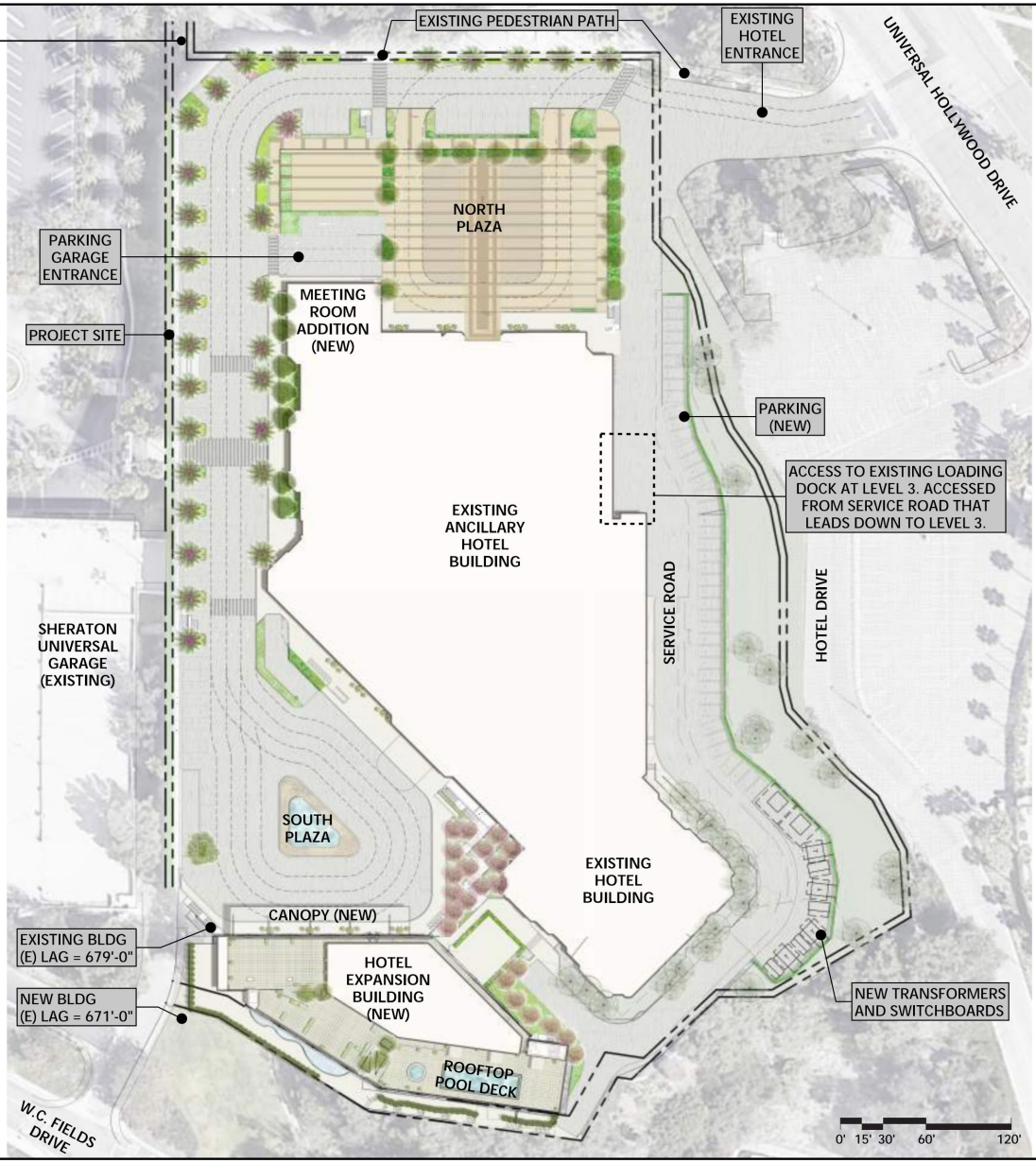
LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

o:\0593\dwg\figure 1 (vicinity map).dwg 07/27/2022 09:56:18 jshender llg exhibits color.ctb




NOTE: No improvements would occur on the L-shaped portion of the Project Site that extends from the northwest corner of the property approximately 200 feet to the north, turns towards the west and extends approximately 325 feet.




N

NOT TO SCALE

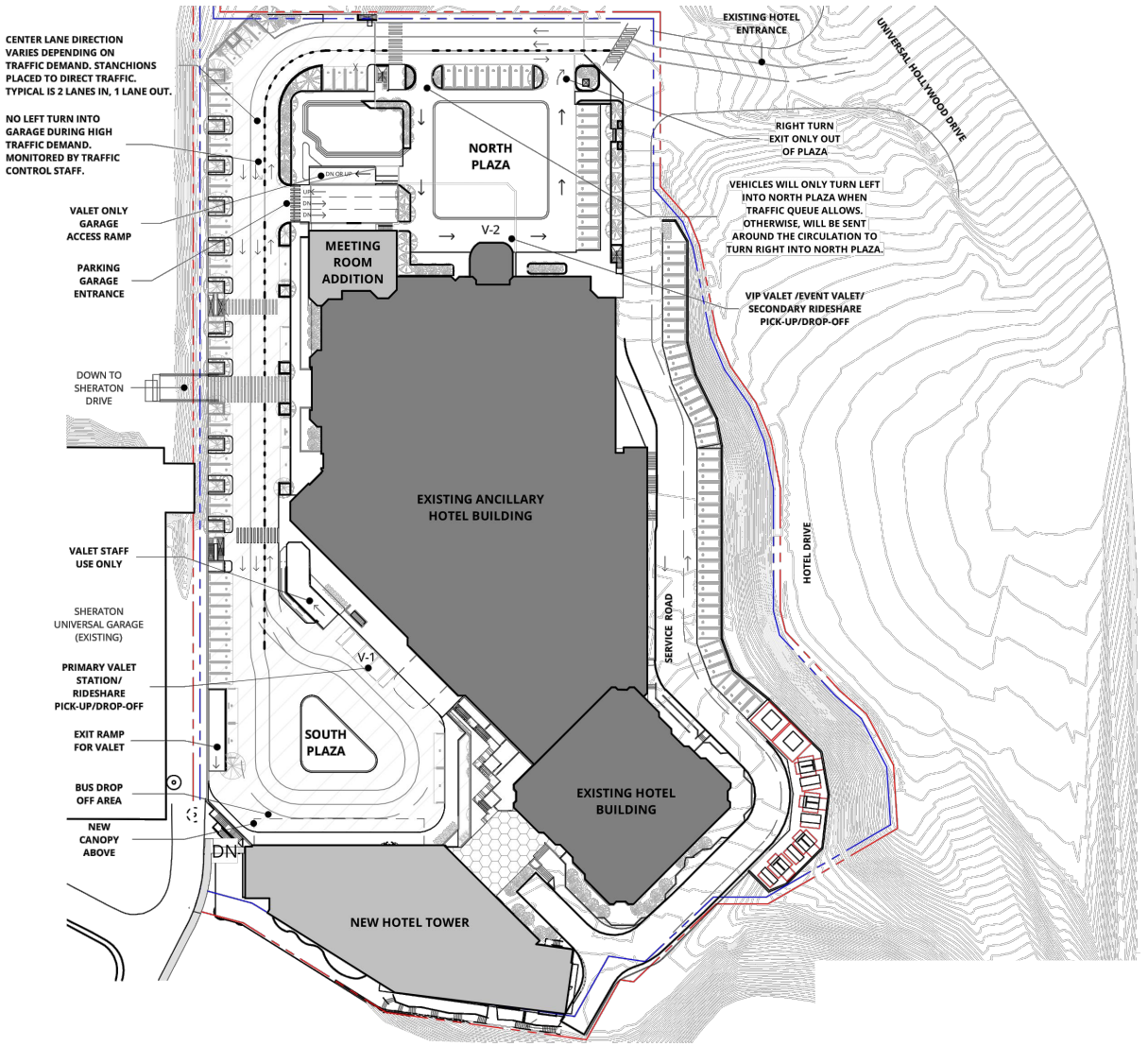
SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 2
# PROJECT CONCEPTUAL SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 2 (project site plan).dwg 04/14/2023 11:16:04 jshender llg bw standard-color.ctb




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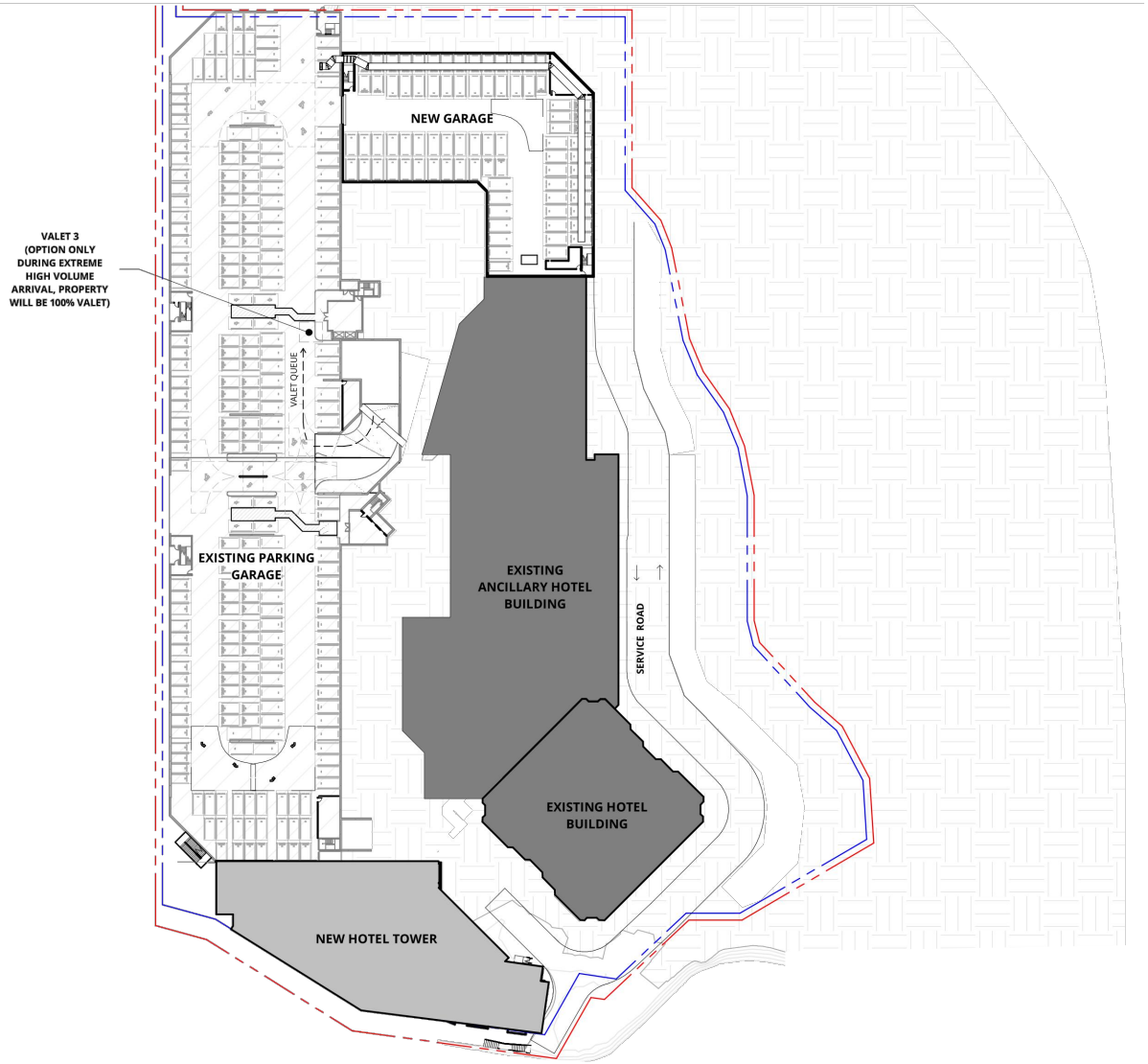
SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 3
# LEVEL 4 VEHICLE CIRCULATION PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 3 (level 4 vehicle circulation plan).dwg 04/06/2023 09:34:51 jshender llg exhibits color.ctb




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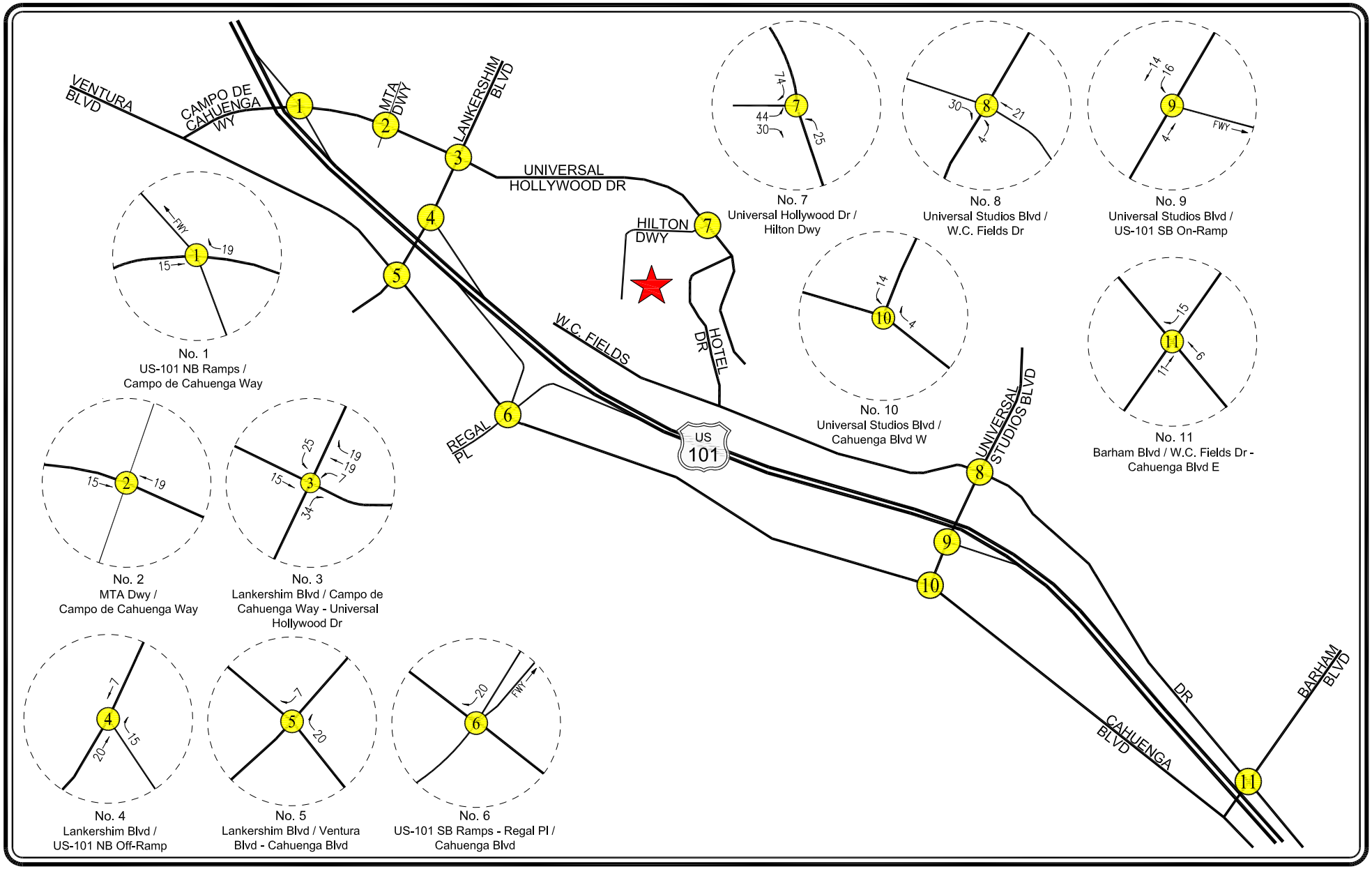
SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 4
# LEVEL 3 VEHICLE CIRCULATION PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 4 (level 3 vehicle circulation plan).dwg 04/06/2023 10:03:06 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

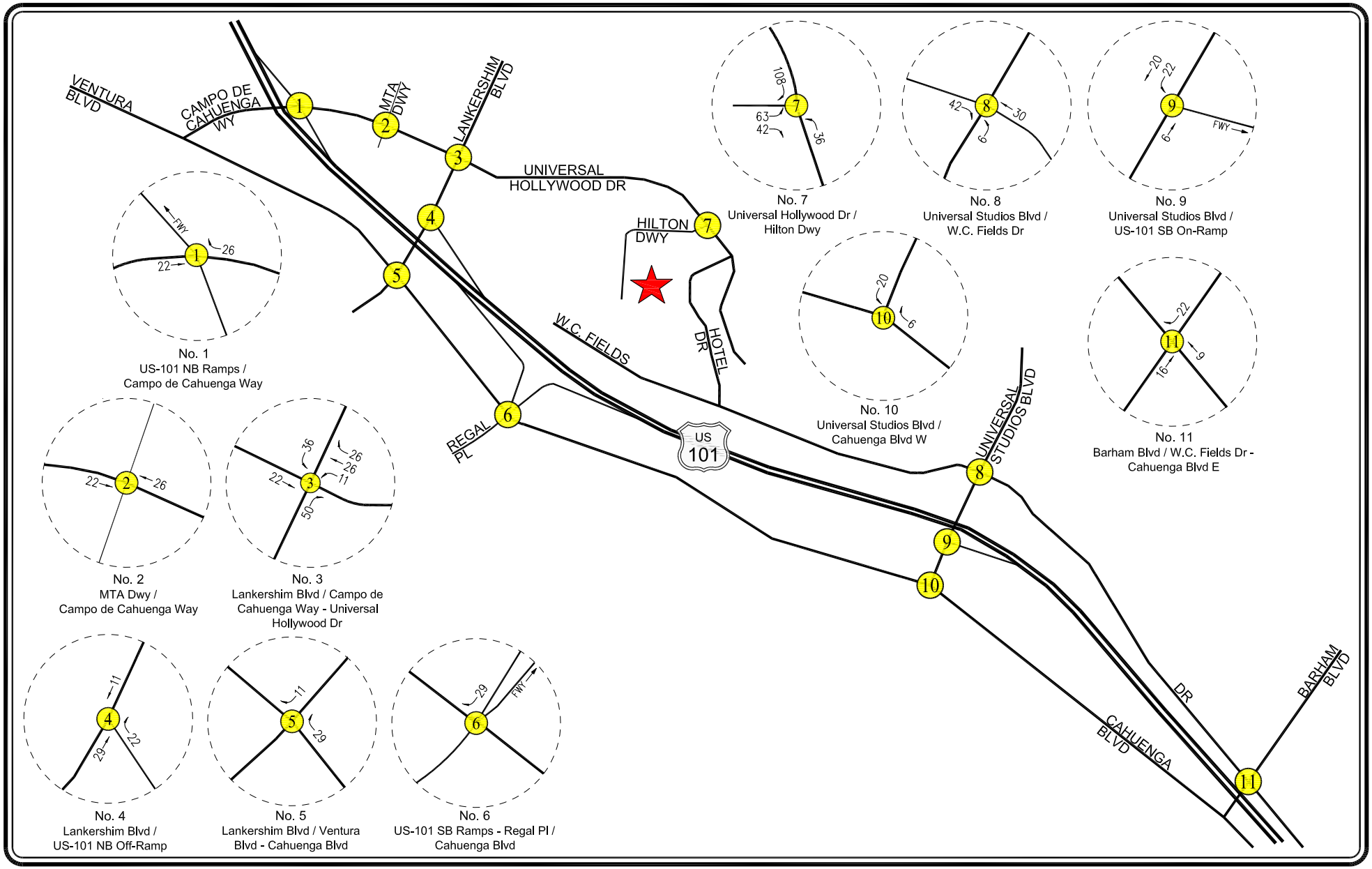
Ⓧ STUDY INTERSECTION

# FIGURE 5
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 5 (net new project traffic volumes - am peak hour).dwg 03/30/2023 16:14:42 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

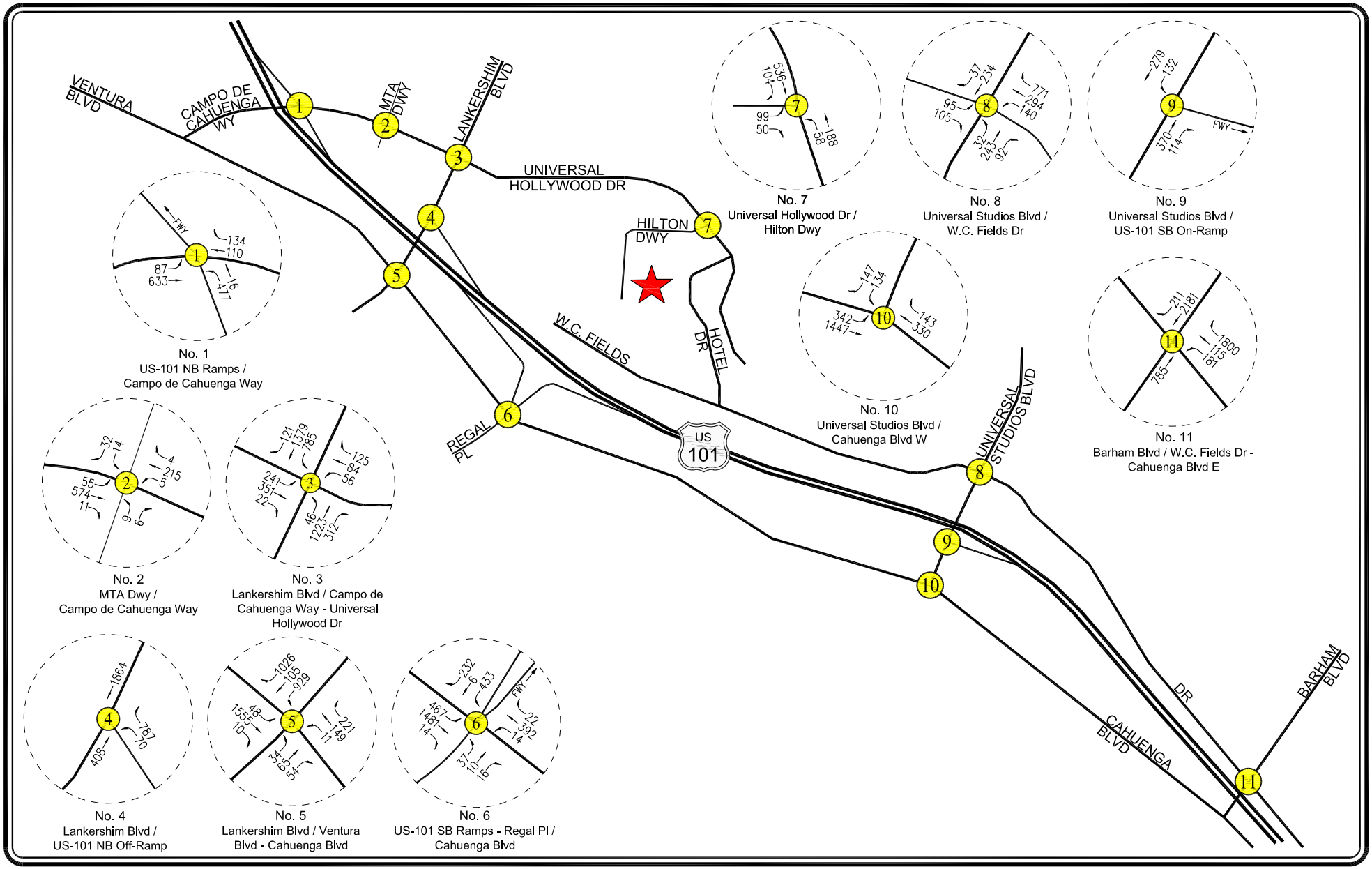
Ⓧ STUDY INTERSECTION

# FIGURE 6
# NET NEW PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 6 (net new project traffic volumes - pm peak hour).dwg 03/30/2023 16:15:58 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

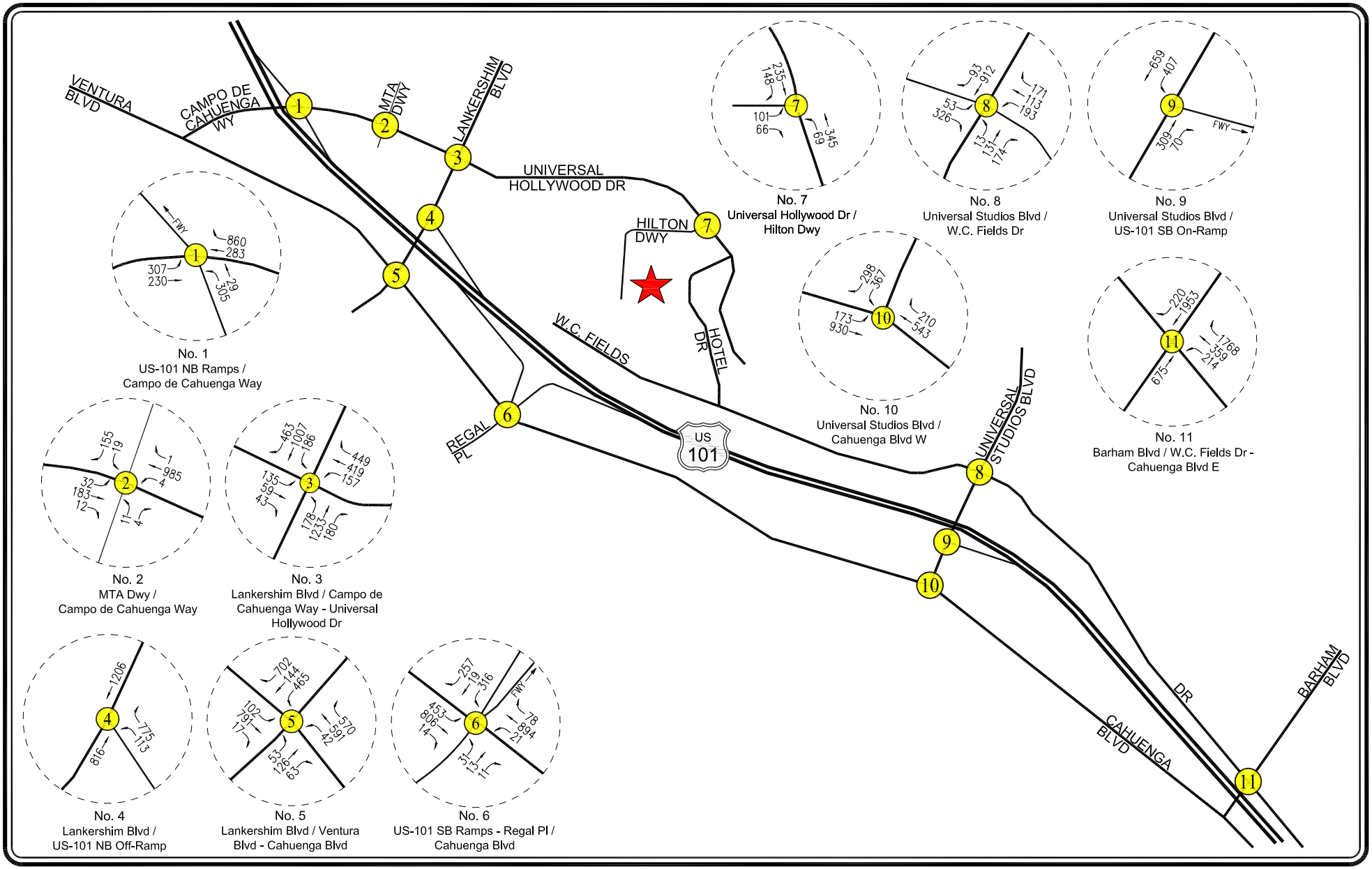
Ⓧ STUDY INTERSECTION

# FIGURE 7
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 7 (existing with project traffic volumes - am peak hour).dwg 03/30/2023 16:13:01 jshender llg exhibits color.ctb




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★ PROJECT SITE

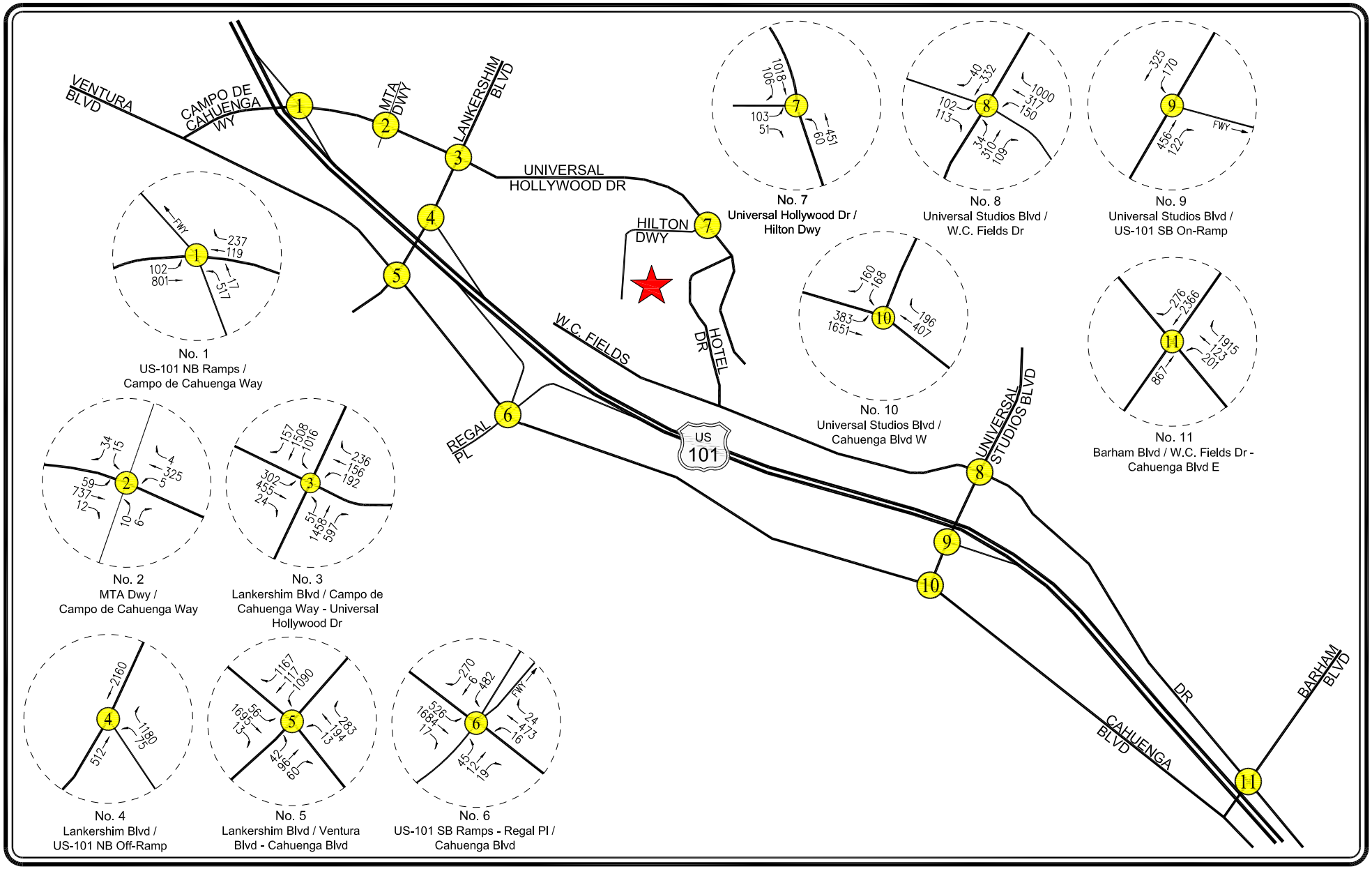
Ⓧ STUDY INTERSECTION

# FIGURE 8
# EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 8 (existing with project traffic volumes - pm peak hour).dwg 03/30/2023 16:23:11 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

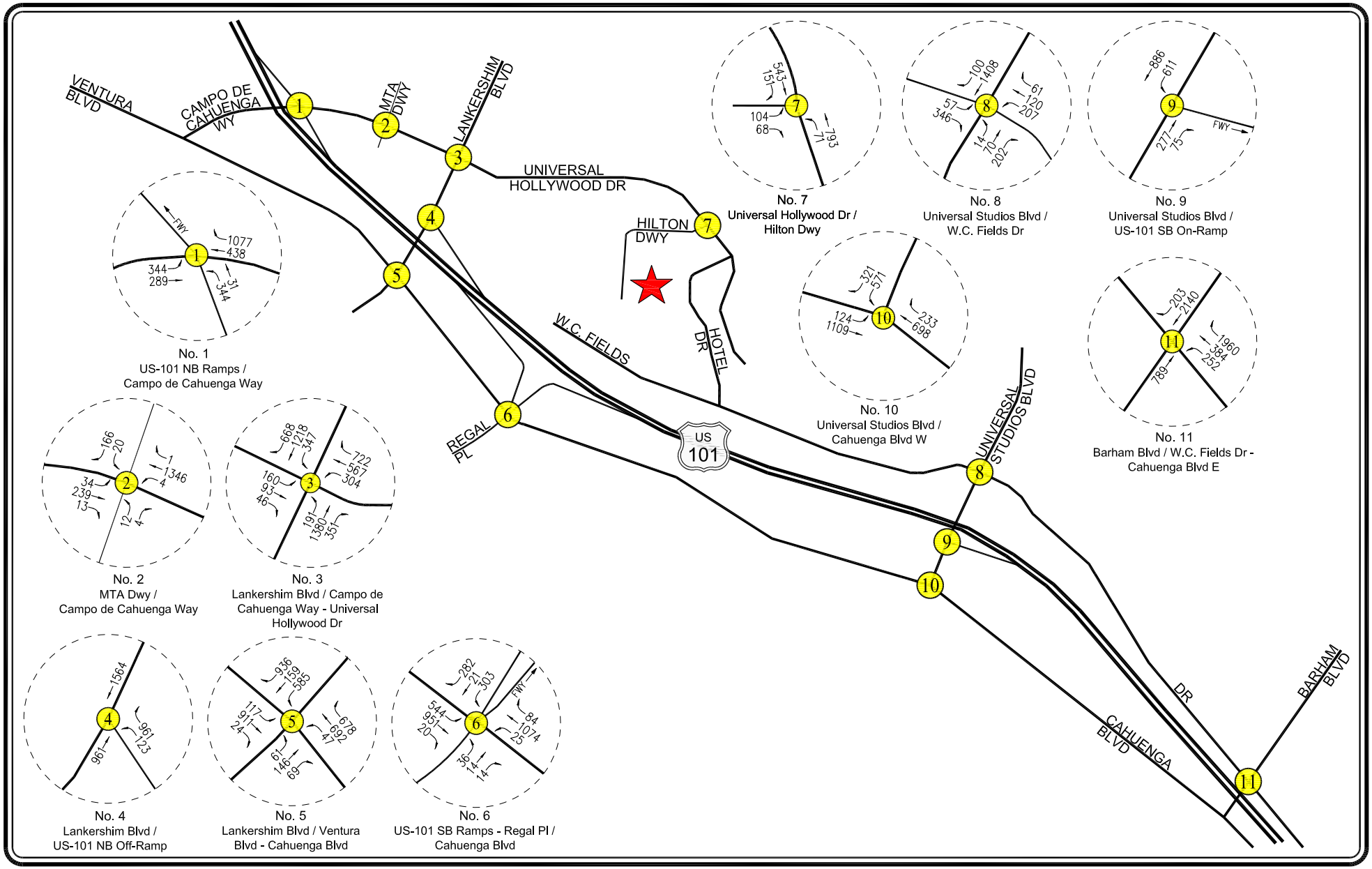
# FIGURE 9

# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 9 (future cumulative with project traffic volumes - am peak hour).dwg 03/30/2023 16:56:10 jshender llg exhibits color.ctb




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NOT TO SCALE

★ PROJECT SITE

Ⓧ STUDY INTERSECTION

# FIGURE 10

# FUTURE CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR
HILTON UNIVERSAL CITY PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

u:\0593\dwg\figure 10 (future cumulative with project traffic volumes - pm peak hour).dwg 03/30/2023 17:09:30 jshender llg exhibits color.ctb

**Table 2**
**PROJECT TRIP GENERATION [1]**

27-Mar-23

| LAND USE | SIZE | AM PEAK HOUR VOLUMES [2] IN | AM OUT | AM TOTAL | PM PEAK HOUR VOLUMES [2] IN | PM OUT | PM TOTAL |
|---|---|---|---|---|---|---|---|
| ***Proposed Project*** | | | | | | | |
| Hotel [3] | 395 Rooms | 102 | 80 | 182 | 119 | 114 | 233 |
| Spa [4] | 8,630 GSF | 6 | 5 | 11 | 17 | 13 | 30 |
| Level 3 and Poolside Restaurants [5] | 7,945 GSF | 42 | 34 | 76 | 44 | 28 | 72 |
| Level 4 Bar and Lounge [6] | 1,590 GSF | -- | -- | -- | 12 | 6 | 18 |
| Rooftop Restaurant [7] | 7,232 GSF | 4 | 1 | 5 | 38 | 18 | 56 |
| **Subtotal** | | 154 | 120 | 274 | 230 | 179 | 409 |
| ***Transit/Walk-In Trips [8]*** | | | | | | | |
| Hotel (25%) | | (26) | (20) | (46) | (30) | (29) | (59) |
| Spa (25%) | | (2) | (1) | (3) | (4) | (3) | (7) |
| Level 3 and Poolside Restaurants (25%) | | (11) | (9) | (20) | (11) | (7) | (18) |
| Level 4 Bar and Lounge (25%) | | 0 | 0 | 0 | (3) | (2) | (5) |
| Rooftop Restaurant (25%) | | (1) | 0 | (1) | (10) | (5) | (15) |
| **Subtotal** | | (40) | (30) | (70) | (58) | (46) | (104) |
| ***Internal Capture*** | | | | | | | |
| Spa [9] (25%) | | (1) | (1) | (2) | (3) | (3) | (6) |
| Level 3 and Poolside Restaurants [9] (25%) | | (8) | (6) | (14) | (8) | (5) | (13) |
| Level 4 Bar and Lounge [9] (25%) | | 0 | 0 | 0 | (2) | (1) | (3) |
| Rooftop Restaurant [10] (15%) | | 0 | 0 | 0 | (4) | (2) | (6) |
| Hotel [11] | | (7) | (9) | (16) | (11) | (17) | (28) |
| **Subtotal** | | (16) | (16) | (32) | (28) | (28) | (50) |
| **NET INCREASE PROJECT TRIPS** | | **98** | **74** | **172** | **144** | **105** | **249** |
| **NET 2022 APPROVED TRANSPORTATION ANALYSIS ADDENDUM TRIPS [12]** | | **94** | **71** | **165** | **129** | **100** | **229** |
| **NET DIFFERENCE (PROJECT TRIPS - 2022 APPROVED TRANSPORTATION ANALYSIS ADDENDUM TRIPS)** | | **4** | **3** | **7** | **15** | **5** | **20** |

[1] Source: ITE *Trip Generation Manual,* 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving
[3] ITE Land Use Code 310 (Hotel) trip generation average rates.
- AM Peak Hour Trip Rate: 0.46 trips/room; 56% inbound/44% outbound
- PM Peak Hour Trip Rate: 0.59 trips/room; 51% inbound/49% outbound
[4] ITE Land Use Code 492 (Health/Fitness Club) trip generation average rates.
- AM Peak Hour Trip Rate: 1.31 trips/1,000 SF of floor area; 51% inbound/49% outbound
- PM Peak Hour Trip Rate: 3.45 trips/1,000 SF of floor area; 57% inbound/43% outbound
[5] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 9.57 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.05 trips/1,000 SF of floor area; 61% inbound/39% outbound
[6] ITE Land Use Code 975 (Drinking Place) trip generation average rates.
- AM Peak Hour Trip Rate: Not provided (assumed to be negligible)
- PM Peak Hour Trip Rate: 11.36 trips/1,000 SF of floor area; 66% inbound/34% outbound
[7] ITE Land Use Code 931 (Fine Dining Restaurant) trip generation average rates.
- AM Peak Hour Trip Rate: 0.73 trips/1,000 SF of floor area; assume 80% inbound/20% outbound
- PM Peak Hour Trip Rate: 7.80 trips/1,000 SF of floor area; 67% inbound/33% outbound
[8] The transit reduction is based on the site's proximity to the Metro B Line (Red) rail station and has been applied to the all components of the Project based on the *LADOT Transportation Assessment Guidelines,* August 2022.
The walk-in trip reduction accounts for walk-in patronage both from within the Project as well as other surrounding uses (i.e., Universal Studios Hollywood, Universal CityWalk)
[9] The internal capture reduction for the spa, Level 3 Restaurant, Poolside Restaurant, and Level 4 Bar and Lounge uses is based on the synergy between the hotel and the spa, Level 3 Restaurant, Poolside Restaurant, and Level 4 Bar and Lounge uses provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.
[10] The internal capture reduction for the Rooftop Restaurant use is based on the synergy between the hotel and the Rooftop Restaurant use provided within the Project Site, the Project characteristics, and the characteristics of the surrounding Project area.
[11] For each internal capture trip related to the spa, restaurant, and bar/lounge uses, a corresponding internal capture trip reduction is assumed for the hotel use.
[12] From Table 2 of 2022 Approved Transportation Analysis Addendum

**Table 4**
**FREEWAY OFF-RAMP QUEUE EVALUATION**
**US-101 FREEWAY SOUTHBOUND OFF-RAMP AT LANKERSHIM BOULEVARD**
**WEEKDAY PM PEAK HOUR**

06-Apr-23

| NO. | INTERSECTION | RAMP AND LANE DESCRIPTION | VEHICLE STORAGE CAPACITY [a] | [1] YEAR 2020 EXISTING | | [2] YEAR 2020 EXISTING W/ PROJECT | | | | [3] YEAR 2027 FUTURE W/O PROJECT | | [4] YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | VEHICLE QUEUE LENGTH [b] | EXCEEDS CAPACITY? | CHANGE QUEUE [(2-1)] | SIGNIF. IMPACT [c] |
| 6 | Cahuenga Boulevard / US-101 Freeway Southbound Ramps - Regal Place | US-101 Southbound Off-Ramp | | | | | | | | | | | | | |
| | | Left | 300 | 258.3 | NO | 258.3 | NO | 0.0 | NO | 247.2 | NO | 247.2 | NO | 0.0 | NO |
| | | Shared Left/Through | 300 | 149.9 | NO | 149.9 | NO | 0.0 | NO | 146.7 | NO | 146.7 | NO | 0.0 | NO |
| | | Right | 300 | 219.7 | NO | 246.1 | NO | 26.4 | NO | 242.5 | NO | 269.5 | NO | 27.0 | NO |
| | | Ramp [d] | 564 | 0.0 | NO | 0.0 | NO | 0.0 | NO | 0 | NO | 0 | NO | 0.0 | NO |

[a] Expressed in feet.
[b] Pursuant to *LADOT Transportation Assessment Guidelines,* August 2022, the Highway Capacity Manual (HCM) methodology for signalized intersections was utilized to calculate vehicle queuing. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 7th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.
[c] Pursuant to *LADOT Transportation Assessment Guidelines, August 2022,* a freeway safety impact shall be deemed significant if a Project is expected to cause or add to a queue extending onto the freeway mainline by more than two vehicle lengths.
[d] The Ramp is the remaining length of the off-ramp, behind any approach lane delineation lines, to the point where the ramp diverges from the freeway mainline.

**Table 5**
**SUMMARY OF DELAYS, LEVELS OF SERVICE, AND VEHICLE QUEUING [1]**
**WEEKDAY AM AND PM PEAK HOURS**

14-Apr-23

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way | Signalized | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 0.0 | 28.2 | C | 304.2 | 28.2 | C | 304.2 | 0.0 |
| | | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 0.0 | 24.5 | C | 187.2 | 24.5 | C | 187.2 | 0.0 |
| | | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 0.0 | 24.0 | C | 161.1 | 24.0 | C | 161.1 | 0.0 |
| | | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 0.0 | 23.1 | C | 110.8 | 23.1 | C | 110.8 | 0.0 |
| | | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 0.0 | 38.5 | D | 116.9 | 38.5 | D | 116.9 | 0.0 |
| | | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 0.0 | 175.0 | F | 680.5 | 175.0 | F | 680.5 | 0.0 |
| | | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.4 | 3.2 | 11.9 | B | 155.6 | 12.0 | B | 159.4 | 3.8 |
| | | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.6 | 3.6 | 10.3 | B | 42.9 | 10.3 | B | 46.7 | 3.8 |
| | | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 0.0 | 21.4 | C | 48.4 | 21.4 | C | 48.4 | 0.0 |
| | | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 0.0 | 24.2 | C | 183.4 | 24.2 | C | 183.4 | 0.0 |
| | | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 55.9 | 8.3 | 23.0 | C | 94.6 | 23.2 | C | 103.8 | 9.2 |
| | | | | PM | 38.1 | D | 400.5 | 40.1 | D | 421.1 | 20.6 | 79.8 | F | 680.1 | 89.2 | F | 732.6 | 52.5 |
| 2 | MTA Driveway / Campo de Cahuenga Way | Signalized | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 0.0 | 11.6 | B | 3.8 | 11.6 | B | 3.8 | 0.0 |
| | | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 0.0 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | 0.0 |
| | | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 0.0 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 0.0 |
| | | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 0.0 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 0.0 |
| | | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 0.0 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | 0.0 |
| | | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 0.0 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | 0.0 |
| | | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 0.0 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | 0.0 |
| | | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 0.0 | 13.2 | B | 62.8 | 13.2 | B | 62.8 | 0.0 |
| | | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 0.1 | 7.5 | A | 18.5 | 7.6 | A | 18.7 | 0.2 |
| | | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 0.1 | 12.4 | B | 14.9 | 12.6 | B | 15.1 | 0.2 |
| | | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.4 | 1.3 | 7.2 | A | 68.4 | 7.3 | A | 70.3 | 1.9 |
| | | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.1 | 1.7 | 6.1 | A | 16.7 | 6.1 | A | 18.4 | 1.7 |
| | | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.7 | 1.5 | 7.6 | A | 72.9 | 7.7 | A | 74.8 | 1.9 |
| | | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.9 | 1.7 | 6.2 | A | 17.7 | 6.3 | A | 19.5 | 1.8 |
| | | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 0.1 | 8.3 | A | 1.8 | 8.3 | A | 1.8 | 0.0 |
| | | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 0.0 | 6.4 | A | 1.0 | 6.4 | A | 1.0 | 0.0 |
| | | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.9 | 1.6 | 6.3 | A | 25.9 | 6.3 | A | 27.5 | 1.6 |
| | | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.4 | 2.8 | 8.6 | A | 125.4 | 8.6 | A | 128.7 | 3.3 |
| | | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 19.0 | 1.8 | 6.4 | A | 27.5 | 6.5 | A | 29.2 | 1.7 |
| | | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.7 | 3.0 | 9.4 | A | 135.8 | 9.5 | A | 139.5 | 3.7 |

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

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive | Signalized | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 0.0 | 36.3 | D | 48.1 | 36.3 | D | 48.1 | 0.0 |
| | | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 0.0 | 152.8 | F | 395.8 | 152.8 | F | 395.8 | 0.0 |
| | | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 0.0 | 31.5 | C | 392.7 | 31.5 | C | 392.7 | 0.0 |
| | | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 0.0 | 32.2 | C | 407.8 | 32.2 | C | 407.8 | 0.0 |
| | | | NB Right | AM | 18.1 | B | 186.6 | 18.8 | B | 209.5 | 22.9 | 27.6 | C | 419.7 | 29.8 | C | 459.2 | 39.5 |
| | | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.9 | 35.9 | 17.6 | B | 211.1 | 18.8 | B | 247.9 | 36.8 |
| | | | SB Left | AM | 204.3 | F | 763.3 | 223.2 | F | 822.6 | 59.3 | 382.5 | F | 1324.6 | 402.1 | F | 1385.9 | 61.3 |
| | | | | PM | 42.6 | D | 84.7 | 44.1 | D | 108.1 | 23.4 | 77.3 | E | 240.7 | 106.8 | F | 303.7 | 63.0 |
| | | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 0.0 | 32.4 | C | 410.5 | 32.4 | C | 410.5 | 0.0 |
| | | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 0.0 | 29.5 | C | 349.1 | 29.5 | C | 349.1 | 0.0 |
| | | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 0.0 | 23.6 | C | 8.2 | 23.6 | C | 8.2 | 0.0 |
| | | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 0.0 | 154.9 | F | 1225.4 | 154.9 | F | 1225.4 | 0.0 |
| | | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 0.0 | 57.5 | E | 194.8 | 57.5 | E | 194.8 | 0.0 |
| | | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 0.0 | 40.6 | D | 89.8 | 40.6 | D | 89.8 | 0.0 |
| | | | EB Through | AM | 47.6 | D | 206.6 | 49.5 | D | 217.7 | 11.1 | 72.3 | E | 310.3 | 78.7 | E | 331.5 | 21.2 |
| | | | | PM | 34.7 | C | 37.5 | 35.0 | C | 53.1 | 15.6 | 35.2 | D | 61.2 | 35.4 | D | 73.2 | 12.0 |
| | | | EB Right | AM | 48.1 | D | 205.6 | 50.1 | D | 216.6 | 11.0 | 73.6 | E | 309.8 | 80.1 | F | 331.0 | 21.2 |
| | | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.6 | 7.5 | 35.3 | D | 59.5 | 35.6 | D | 71.1 | 11.6 |
| | | | WB Left | AM | 40.8 | D | 50.5 | 41.1 | D | 58.0 | 7.5 | 85.3 | F | 278.3 | 94.6 | F | 301.2 | 22.9 |
| | | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 18.6 | 223.5 | F | 691.3 | 244.4 | F | 746.2 | 54.9 |
| | | | WB Through | AM | 38.0 | D | 31.9 | 38.2 | D | 41.4 | 9.5 | 38.8 | D | 68.6 | 39.1 | D | 78.5 | 9.9 |
| | | | | PM | 40.6 | D | 219.4 | 41.9 | D | 234.9 | 15.5 | 58.5 | E | 338.2 | 67.1 | E | 374.4 | 36.2 |
| | | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 103.0 | 16.9 | 28.6 | C | 190.6 | 29.1 | C | 205.7 | 15.1 |
| | | | | PM | 84.6 | F | 597.4 | 103.8 | F | 690.7 | 93.3 | 353.4 | F | 1909.8 | 381.3 | F | 2046.8 | 137.0 |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp | Signalized | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.9 | 5.9 | 11.6 | B | 127.5 | 11.7 | B | 133.8 | 6.3 |
| | | | | PM | 13.3 | B | 226.2 | 13.5 | B | 235.0 | 8.8 | 14.3 | B | 272.0 | 14.5 | B | 280.7 | 8.7 |
| | | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.7 | 1.8 | 19.4 | B | 467.3 | 19.5 | B | 469.4 | 2.1 |
| | | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 2.5 | 15.2 | C | 310.4 | 15.3 | C | 313.1 | 2.7 |
| | | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 0.0 | 21.4 | C | 54.7 | 21.4 | C | 54.7 | 0.0 |
| | | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 0.0 | 22.2 | C | 95.7 | 22.2 | C | 95.7 | 0.0 |
| | | | WB Right | AM | 32.6 | C | 344.6 | 33.4 | C | 354.5 | 9.9 | 129.5 | F | 949.0 | 136.0 | F | 985.8 | 36.8 |
| | | | | PM | 32.9 | C | 348.1 | 34.2 | C | 363.5 | 15.4 | 58.6 | E | 547.8 | 63.9 | F | 578.7 | 30.9 |

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

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard | Signalized | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 0.0 | 38.2 | D | 204.9 | 38.2 | D | 204.9 | 0.0 |
| | | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 0.0 | 48.0 | D | 298.6 | 48.0 | D | 298.6 | 0.0 |
| | | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 0.0 | 338.6 | F | 1875.0 | 338.6 | F | 1875.0 | 0.0 |
| | | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 0.0 | 53.2 | D | 415.1 | 53.2 | D | 415.1 | 0.0 |
| | | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 0.0 | 97.1 | F | 658.5 | 97.1 | F | 658.5 | 0.0 |
| | | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 0.0 | 42.5 | D | 341.0 | 42.5 | D | 341.0 | 0.0 |
| | | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- |
| | | | | PM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- |
| | | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 0.0 | 20.4 | C | 38.3 | 20.4 | C | 38.3 | 0.0 |
| | | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 0.0 | 23.9 | C | 83.5 | 23.9 | C | 83.5 | 0.0 |
| | | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 0.0 | 30.2 | C | 450.6 | 30.2 | C | 450.6 | 0.0 |
| | | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 0.0 | 22.7 | C | 229.0 | 22.7 | C | 229.0 | 0.0 |
| | | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 0.0 | 33.9 | C | 472.8 | 33.9 | C | 472.8 | 0.0 |
| | | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 0.0 | 23.6 | C | 232.9 | 23.6 | C | 232.9 | 0.0 |
| | | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 0.0 | 42.1 | D | 16.3 | 42.1 | D | 16.3 | 0.0 |
| | | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 0.0 | 33.1 | C | 47.5 | 33.1 | C | 47.5 | 0.0 |
| | | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 0.0 | 30.6 | C | 87.2 | 30.6 | C | 87.2 | 0.0 |
| | | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 0.0 | 42.1 | D | 334.3 | 42.1 | D | 334.3 | 0.0 |
| | | | WB Right | AM | 15.3 | B | 122.9 | 15.7 | B | 137.1 | 14.2 | 16.4 | B | 169.0 | 16.7 | B | 184.9 | 15.9 |
| | | | | PM | 24.0 | C | 381.2 | 25.3 | C | 410.8 | 29.6 | 30.7 | C | 506.2 | 33.6 | C | 549.7 | 43.5 |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard | Signalized | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 0.0 | 36.4 | D | 84.6 | 36.4 | D | 84.6 | 0.0 |
| | | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 0.0 | 36.1 | D | 70.7 | 36.1 | D | 70.7 | 0.0 |
| | | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 0.0 | 75.5 | E | 459.2 | 75.5 | E | 459.2 | 0.0 |
| | | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 0.0 | 46.2 | D | 247.2 | 46.2 | D | 247.2 | 0.0 |
| | | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 0.0 | 43.7 | D | 202.8 | 43.7 | D | 202.8 | 0.0 |
| | | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 0.0 | 42.0 | D | 146.7 | 42.0 | D | 146.7 | 0.0 |
| | | | SB Right | AM | 28.2 | C | 205.5 | 28.7 | C | 223.2 | 17.7 | 29.1 | C | 239.7 | 29.7 | C | 258.3 | 18.6 |
| | | | | PM | 28.6 | C | 219.7 | 29.3 | C | 246.1 | 26.4 | 29.2 | C | 242.5 | 30.0 | C | 269.5 | 27.0 |
| | | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 0.0 | 29.7 | C | 240.6 | 29.7 | C | 240.6 | 0.0 |
| | | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 0.0 | 35.8 | D | 263.1 | 35.8 | D | 263.1 | 0.0 |
| | | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 0.0 | 107.3 | F | 1293.3 | 107.3 | F | 1293.3 | 0.0 |
| | | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 0.0 | 32.4 | C | 447.7 | 32.4 | C | 447.7 | 0.0 |
| | | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 0.0 | 108.4 | F | 1297.9 | 108.4 | F | 1297.9 | 0.0 |
| | | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 0.0 | 32.4 | C | 445.1 | 32.4 | C | 445.1 | 0.0 |
| | | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 0.0 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | 0.0 |
| | | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 0.0 | 42.1 | D | 32.6 | 42.1 | D | 32.6 | 0.0 |
| | | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 0.0 | 48.8 | D | 286.7 | 48.8 | D | 286.7 | 0.0 |
| | | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 0.0 | 285.0 | F | 1338.2 | 285.0 | F | 1338.2 | 0.0 |
| | | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 0.0 | 21.9 | C | 19.9 | 21.9 | C | 19.9 | 0.0 |
| | | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 0.0 | 23.1 | C | 72.5 | 23.1 | C | 72.5 | 0.0 |

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

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 7 | Universal Hollywood Drive / Hilton Driveway | Unsignalized | NB Left | AM | 9.0 | A | 2.5 | 9.5 | A | 5.0 | 2.5 | 11.6 | B | 5.0 | 12.6 | B | 10.0 | 5.0 |
| | | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 5.0 | 9.4 | A | 5.0 | 10.3 | B | 10.0 | 5.0 |
| | | | EB Left | AM | 13.7 | B | 10.0 | 15.8 | C | 25.0 | 15.0 | 24.9 | C | 27.5 | 34.8 | D | 62.5 | 35.0 |
| | | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 17.5 | 16.0 | C | 12.5 | 22.7 | C | 45.0 | 32.5 |
| | | | EB Right | AM | 10.5 | B | 2.5 | 11.2 | B | 7.5 | 5.0 | 13.5 | B | 5.0 | 14.9 | B | 12.5 | 7.5 |
| | | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 7.5 | 11.0 | B | 5.0 | 12.4 | B | 12.5 | 7.5 |
| 8 | Universal Studios Boulevard / W.C. Fields Drive | Signalized | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 2.9 | 19.7 | B | 22.0 | 19.8 | B | 25.0 | 3.0 |
| | | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 5.2 | 28.4 | C | 7.9 | 29.6 | C | 14.2 | 6.3 |
| | | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 0.0 | 18.8 | B | 107.2 | 18.8 | B | 107.2 | 0.0 |
| | | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 0.0 | 17.1 | B | 22.1 | 17.1 | B | 22.1 | 0.0 |
| | | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- |
| | | | | PM | 0.0 | A | -- | 0.0 | A | -- | -- | 0.0 | A | -- | 0.0 | A | -- | -- |
| | | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 0.0 | 17.7 | B | 61.4 | 17.7 | B | 61.4 | 0.0 |
| | | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 0.0 | 22.2 | C | 272.9 | 22.2 | C | 272.9 | 0.0 |
| | | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 0.0 | 18.1 | B | 62.3 | 18.1 | B | 62.3 | 0.0 |
| | | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 0.0 | 24.2 | C | 276.5 | 24.2 | C | 276.5 | 0.0 |
| | | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 0.0 | 34.5 | C | 96.7 | 34.5 | C | 96.7 | 0.0 |
| | | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 0.0 | 33.1 | C | 51.7 | 33.1 | C | 51.7 | 0.0 |
| | | | EB Right | AM | 34.1 | C | 72.3 | 35.3 | D | 103.4 | 31.1 | 34.3 | C | 78.4 | 35.6 | D | 109.8 | 31.4 |
| | | | | PM | 145.6 | F | 516.2 | 213.1 | F | 711.0 | 194.8 | 176.8 | F | 606.0 | 247.4 | F | 810.1 | 204.1 |
| | | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 0.0 | 26.6 | C | 121.1 | 26.6 | C | 121.1 | 0.0 |
| | | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 0.0 | 27.9 | C | 172.1 | 27.9 | C | 172.1 | 0.0 |
| | | | WB Through | AM | 29.8 | C | 229.7 | 30.8 | C | 249.0 | 19.3 | 31.0 | C | 250.9 | 32.3 | C | 271.7 | 20.8 |
| | | | | PM | 25.2 | C | 63.1 | 25.8 | C | 87.6 | 24.5 | 25.3 | C | 68.6 | 25.9 | C | 93.2 | 24.6 |
| | | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 0.0 | 44.7 | D | 331.8 | 44.7 | D | 331.8 | 0.0 |
| | | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 0.0 | 24.3 | C | 14.8 | 24.3 | C | 14.8 | 0.0 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp | Signalized | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 0.5 | 5.8 | A | 45.9 | 5.8 | A | 46.2 | 0.3 |
| | | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 0.4 | 5.5 | A | 26.4 | 5.5 | A | 26.8 | 0.4 |
| | | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 0.5 | 6.1 | A | 45.7 | 6.1 | A | 46.1 | 0.4 |
| | | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 0.5 | 5.7 | A | 26.9 | 5.7 | A | 27.3 | 0.4 |
| | | | SB Left | AM | 18.0 | B | 58.4 | 18.3 | B | 67.1 | 8.7 | 18.5 | B | 79.4 | 18.8 | B | 88.6 | 9.2 |
| | | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 50.3 | 201.0 | F | 1099.2 | 223.0 | F | 1210.9 | 111.7 |
| | | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.0 | 0.2 | A | 0.6 | 0.2 | A | 0.6 | 0.0 |
| | | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.1 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.0 |

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

| NO. | INTERSECTION | INTERSECTION CONTROL | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | | YEAR 2027 FUTURE W/O PROJECT | | | YEAR 2027 FUTURE W/ PROJECT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | CHANGE IN QUEUE [5] |
| 10 | Universal Studios Boulevard / | Signalized | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 56.5 | 6.1 | 21.3 | C | 65.4 | 21.4 | C | 71.7 | 6.3 |
| | Cahuenga Boulevard West | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 10.1 | 24.5 | C | 245.0 | 24.7 | C | 253.5 | 8.5 |
| | | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 0.0 | 11.4 | B | 46.3 | 11.4 | B | 46.3 | 0.0 |
| | | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 0.0 | 12.2 | B | 97.3 | 12.2 | B | 97.3 | 0.0 |
| | | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 0.0 | 54.3 | D | 264.7 | 54.3 | D | 264.7 | 0.0 |
| | | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 0.0 | 44.4 | D | 78.7 | 44.4 | D | 78.7 | 0.0 |
| | | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 0.0 | 54.4 | F | 993.7 | 54.4 | F | 993.7 | 0.0 |
| | | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 0.0 | 24.7 | C | 462.5 | 24.7 | C | 462.5 | 0.0 |
| | | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 0.0 | 36.1 | D | 231.9 | 36.1 | D | 231.9 | 0.0 |
| | | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 0.0 | 42.8 | D | 392.0 | 42.8 | D | 392.0 | 0.0 |
| | | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 1.6 | 6.3 | A | 77.3 | 6.3 | A | 79.3 | 2.0 |
| | | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 2.7 | 6.5 | A | 91.9 | 6.5 | A | 95.0 | 3.1 |
| 11 | Barham Boulevard / | Signalized | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 240.1 | 3.5 | 19.4 | B | 263.3 | 19.5 | B | 266.9 | 3.6 |
| | W.C. Fields Drive - Cahuenga Boulevard East | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 4.6 | 18.6 | B | 236.3 | 18.8 | B | 241.5 | 5.2 |
| | | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 0.0 | 53.0 | F | 730.0 | 53.0 | F | 730.0 | 0.0 |
| | | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 0.0 | 32.3 | C | 538.1 | 32.3 | C | 538.1 | 0.0 |
| | | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 131.7 | 11.0 | 18.7 | B | 171.2 | 19.1 | B | 183.8 | 12.6 |
| | | | | PM | 17.2 | B | 122.0 | 17.7 | B | 138.7 | 16.7 | 16.9 | B | 109.8 | 17.3 | B | 125.7 | 15.9 |
| | | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.7 | 4.2 | 17.0 | B | 187.4 | 17.1 | B | 190.9 | 3.5 |
| | | | | PM | 22.2 | C | 353.2 | 22.5 | C | 361.0 | 7.8 | 25.0 | C | 412.8 | 25.5 | C | 422.1 | 9.3 |
| | | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 0.0 | 262.7 | F | 2108.3 | 262.7 | F | 2108.3 | 0.0 |
| | | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 0.0 | 278.6 | F | 2227.9 | 278.6 | F | 2227.9 | 0.0 |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* August 2022, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

[4] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 7th Edition methodology worksheets report queues in number of vehicles, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet.

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

# APPENDIX A

## LADOT ASSESSMENT LETTER FOR THE 2020 APPROVED TRANSPORTATION ASSESSMENT

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




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NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

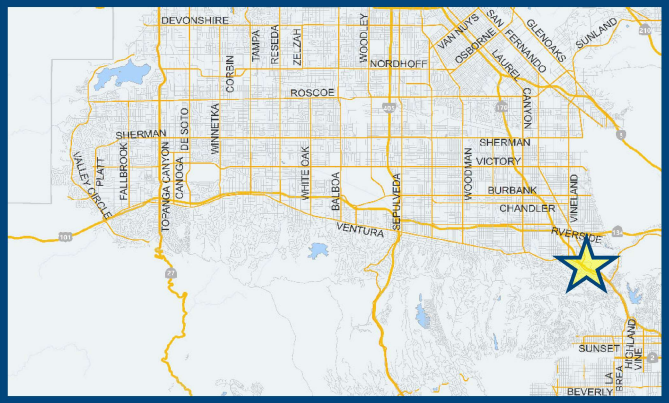
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

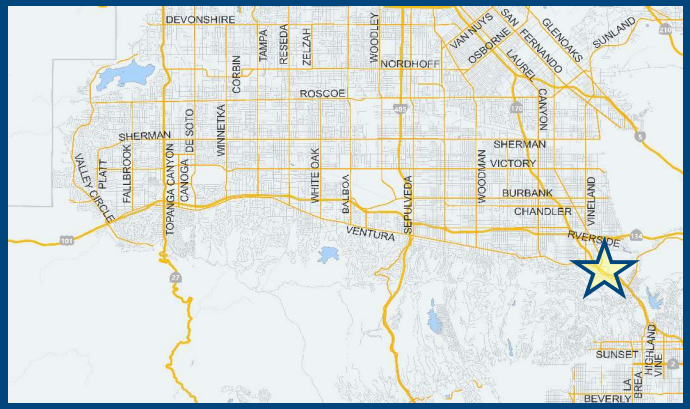
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# ATTACHMENT C
# CEN18-46906_555 E Universal Hollywood Dr

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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

# APPENDIX B

## LADOT ASSESSMENT LETTER FOR THE 2022 APPROVED TRANSPORTATION ANALYSIS ADDENDUM

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN22-54260

Date: October 20, 2022

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT ADDENDUM FOR THE PROPOSED REVISED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

On December 18, 2020, the Los Angeles Department of Transportation (LADOT) issued a transportation assessment report to the Department of City Planning (**Attachment 1**) for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC) based on the transportation analyses prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020. However, since the report was released, the project description has been modified: additional restaurant use type, smaller meeting room space, omission of the ballroom, site plan (**Attachment 2**) and later project completion date; addendum transportation analyses dated September 19, 2022 and October 14, 2022 were prepared by LLG: and LADOT published an updated version of the LADOT's Transportation Assessment Guidelines (TAG) dated August 2022.

The current project proposal compares to the original project as follows:

| **Land Use** | **Original Project (2020)** | **Current Project (2022)** |
|---|---|---|
| Hotel | 395 Guestrooms | 395 Guestrooms |
| Quality Restaurant | 12,000 square feet (sf) | 5,950 sf |
| High-Turnover Restaurant | --- | 6,050 sf |
| Spa | 10,000 sf | 9,570 sf |
| Ancillary Ballroom | 5,000 sf | --- |
| Ancillary Meeting Room | 10,000 sf | 3,425 sf |
| Vehicle Parking | 408 new spaces<br>(Total 1,060) | 464 new spaces<br>(Total 1,116) |
| Bicycle Parking | 73 spaces<br>(43 short-term/30 long-term) | 62 spaces<br>(31 short-term/31 long-term) |
| Completion Year | 2025 | 2027 |

The September 19 and October 14, 2022 analyses included updates of the following: related projects, CEQA VMT (Vehicle Miles Travelled) analysis (**Attachment 3**), CEQA Geometric Design Analysis, and Non-

CEQ Project Access and Circulation Review. LADOT concurs with the results of the updated assessments that based on the latest TAG dated August 2022, the project's expected impacts would continue to be less than significant. All of the project requirements that are identified in LADOT's December 18, 2020 letter (**Attachment 1**) shall remain in effect.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

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c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Hokchii Chiu, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

o:\0485\dwg\f2-2.dwg 10/28/2020 16:36:46 jshender llg exhibits color.ctb

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

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

## Project Information

**Project:** Hilton Universal City
**Scenario:** Proposed Project (No TDM)
**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

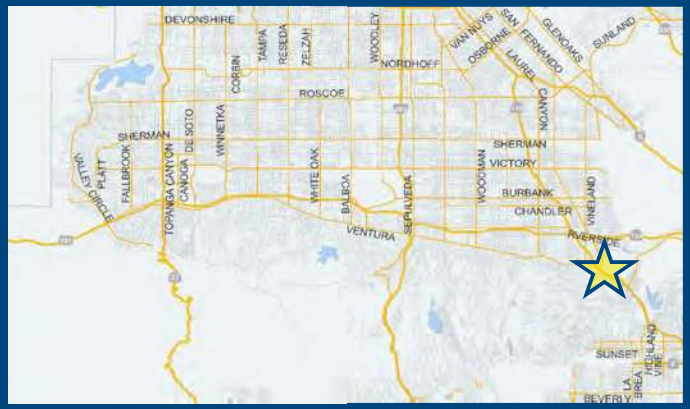
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply** ☐ Proposed Prj ☐ Mitigation
- 100 city code parking provision for the project site
- 74 actual parking provision for the project site

**Unbundle Parking** ☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

**Parking Cash-Out** ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

**Price Workplace Parking** ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

**Residential Area Parking Permits** ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# ATTACHMENT C
# CEN18-46906_555 E Universal Hollywood Dr

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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




N

NOT TO SCALE

SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 2
# PROJECT CONCEPTUAL SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

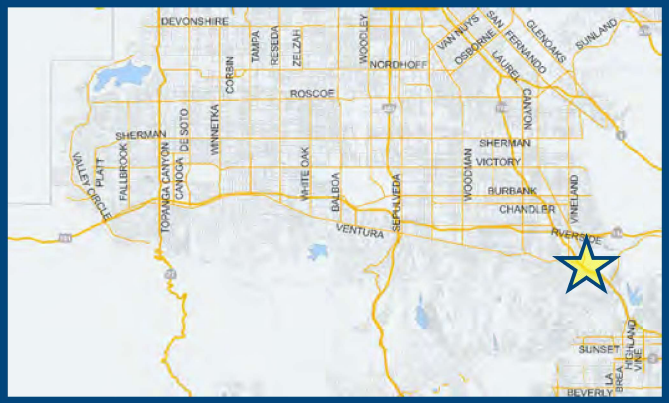
u:\0593\dwg\figure 2 (project site plan).dwg 09/19/2022 13:40:33 jshender llg bw standard-color.ctb

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

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

## Project Information

**Project:** Hilton Universal City
**Scenario:** Proposed Project (No PDFs)
**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Quality Restaurant | 5.95 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,421 Daily Vehicle Trips |
| 0 Daily VMT | 30,688 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,421 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 30,688 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 21.570 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

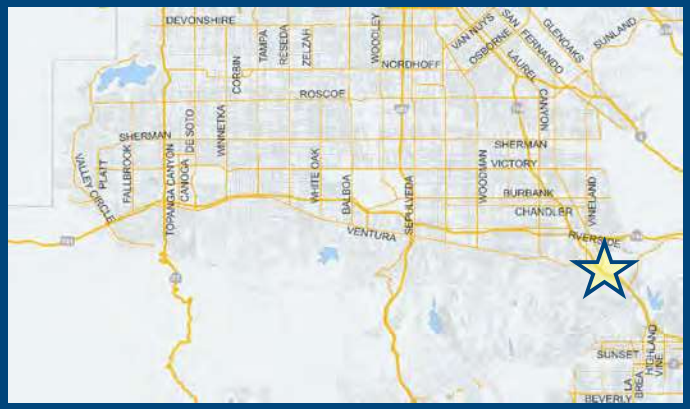
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**

☐ Proposed Prj ☐ Mitigation

100 city code parking provision for the project site

74 actual parking provision for the project site

**Unbundle Parking**

☐ Proposed Prj ☐ Mitigation

175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**

☐ Proposed Prj ☐ Mitigation

50 percent of employees eligible

**Price Workplace Parking**

☐ Proposed Prj ☐ Mitigation

6.00 daily parking charge (dollar)

50 percent of employees subject to priced parking

**Residential Area Parking Permits**

☐ Proposed Prj ☐ Mitigation

200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,421** Daily Vehicle Trips | **4,421** Daily Vehicle Trips |
| **30,688** Daily VMT | **30,688** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

8/3/2022

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 9.570 | ksf |
| | High-Turnover Sit-Down Restaurant | 6.050 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 5.950 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 255<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,421** | **Daily Vehicle Trips** | **4,421** | **Daily Vehicle Trips** |
| **30,688** | **Daily VMT** | **30,688** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |
| **Significant VMT Impact?** | | | |
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 652 | -1.5% | 642 | 8.6 | 5,607 | 5,521 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,173 | -11.0% | 2,824 | 6.4 | 20,307 | 18,074 |
| Non-Home Based Other Attraction | 652 | -1.5% | 642 | 7.1 | 4,629 | 4,558 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 642 | 5,521 | 0.0% | 642 | 5,521 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,824 | 18,074 | 0.0% | 2,824 | 18,074 |
| Non-Home Based Other Attraction | 0.0% | 642 | 4,558 | 0.0% | 642 | 4,558 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 255
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# APPENDIX C

## LADOT VMT CALCULATOR OUTPUT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

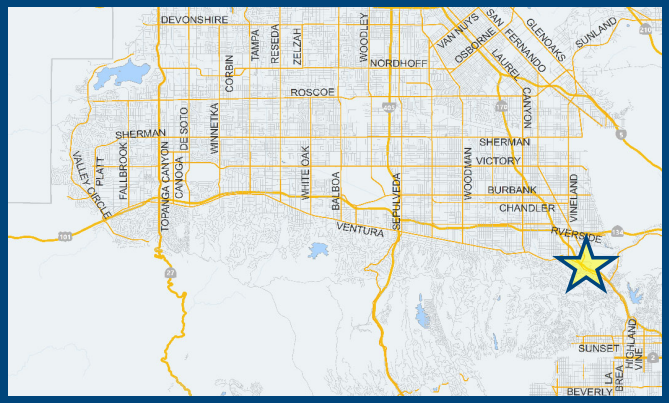
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| HBO-Production Split | 0 | Percent |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,902 Daily Vehicle Trips |
| 0 Daily VMT | 34,132 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,902 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 34,132 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 23.807 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

3/28/2023

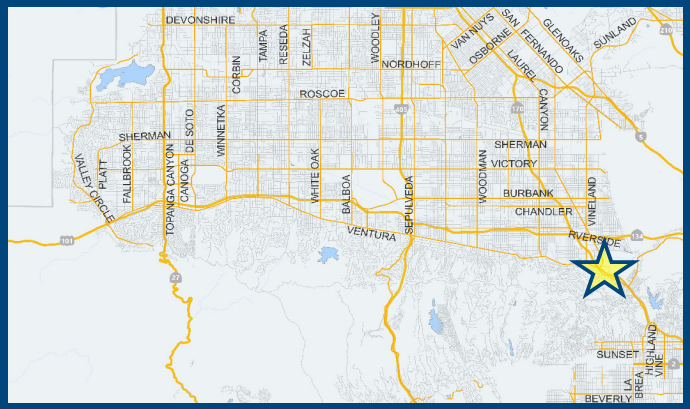
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| HBO-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| NHB-Production Split | 22 | Percent |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,309** Daily Vehicle Trips | **4,309** Daily Vehicle Trips |
| **29,995** Daily VMT | **29,995** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **8.8** Work VMT per Employee | **8.8** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

3/28/2023

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 8.630 | ksf |
| | High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 7.232 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| **Other** | Bar/Lounge | 194 | Trips |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 273<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,309** | **Daily Vehicle Trips** | **4,309** | **Daily Vehicle Trips** |
| **29,995** | **Daily VMT** | **29,995** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **8.8** | **Work VMT per Employee** | **8.8** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Transit** | *Reduce transit headways* | *Reduction in headways (increase in frequency) (%)* | *0%* | *0%* |
| | | *Existing transit mode share (as a percent of total daily trips) (%)* | *0%* | *0%* |
| | | *Lines within project site improved (<50%, >=50%)* | *0* | *0* |
| | *Implement neighborhood shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees and residents eligible (%)* | *0%* | *0%* |
| | Transit subsidies | Employees and residents eligible (%) | 100% | 100% |
| | | Amount of transit subsidy per passenger (daily equivalent) ($) | $1.49 | $1.49 |
| **Education & Encouragement** | *Voluntary travel behavior change program* | *Employees and residents participating (%)* | *0%* | *0%* |
| | Promotions and marketing | Employees and residents participating (%) | 100% | 100% |

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Parking** | Reduce parking supply | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Parking sections 1 - 5 |
| | Unbundle parking | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Parking cash-out | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Price workplace parking | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Residential area parking permits | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | |
| **Transit** | Reduce transit headways | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Transit sections 1 - 3 |
| | Implement neighborhood shuttle | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Transit subsidies | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | |
| **Education & Encouragement** | Voluntary travel behavior change program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Education & Encouragement sections 1 - 2 |
| | Promotions and marketing | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | *0%* | |
| **Commute Trip Reductions** | Required commute trip reduction program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4 |
| | Alternative Work Schedules and Telecommute Program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Employer sponsored vanpool or shuttle | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Ride-share program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| **Shared Mobility** | Car-share | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Shared Mobility sections 1 - 3 |
| | 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%* | |
| | 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**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Bicycle Infrastructure** | Implement/ Improve on-street bicycle facility | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3 |
| | Include Bike parking per LAMC | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | Include secure bike parking and showers | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| **Neighborhood Enhancement** | Traffic calming improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2 |
| | Pedestrian network improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | |

## Final Combined & Maximum TDM Effect

| | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated |
| **COMBINED TOTAL** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *8%* |
| **MAX. TDM EFFECT** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* |

***= Minimum (X%, 1-[(1-A)*(1-B)…])***
*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 766 | -1.6% | 754 | 8.6 | 6,588 | 6,484 |
| Home-Based Work Attraction | 399 | -15.5% | 337 | 8.1 | 3,232 | 2,730 |
| Home-Based Other Attraction | 3,435 | -11.0% | 3,057 | 6.4 | 21,984 | 19,565 |
| Non-Home Based Other Attraction | 766 | -1.6% | 754 | 7.1 | 5,439 | 5,353 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Home Based Other Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Non-Home Based Other Production | -12.1% | 663 | 5,698 | -12.1% | 663 | 5,698 |
| Home-Based Work Attraction | -12.1% | 296 | 2,399 | -12.1% | 296 | 2,399 |
| Home-Based Other Attraction | -12.1% | 2,687 | 17,194 | -12.1% | 2,687 | 17,194 |
| Non-Home Based Other Attraction | -12.1% | 663 | 4,704 | -12.1% | 663 | 4,704 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 273
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,399** | **2,399** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **8.8** | **8.8** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| You, the User | |
|---|---|
| By: |  |
| Print Name: | Jason Shender, AICP |
| Title: | Transportation Planner III |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 600 S. Lake Avenue, Suite 500<br>Pasadena, CA 91106 |
| Phone: | (626) 796-2322 |
| Email Address: | jshender@llgengineers.com |
| Date: | 3/28/2023 |

# APPENDIX D

## LADOT VMT CALCULATOR OUTPUT (NO TDM)

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

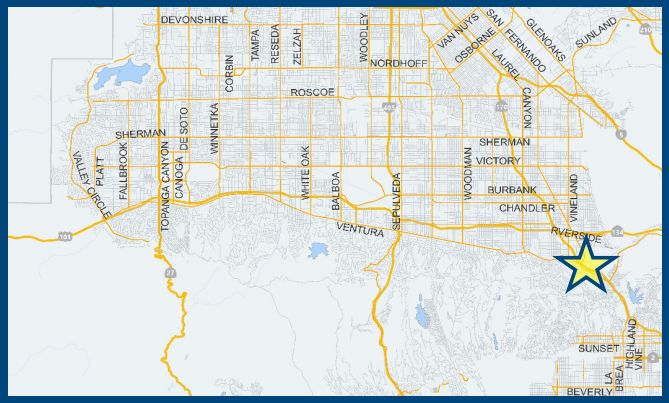
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,902 Daily Vehicle Trips |
| 0 Daily VMT | 34,132 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,902 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 34,132 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 23.807 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

3/28/2023

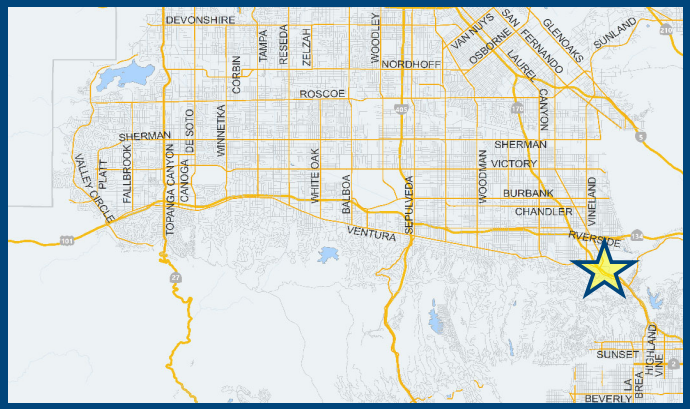
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| HBO-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| NHB-Production Split | 22 | Percent |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,902** Daily Vehicle Trips | **4,902** Daily Vehicle Trips |
| **34,132** Daily VMT | **34,132** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **10.0** Work VMT per Employee | **10.0** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

3/28/2023

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 8.630 | ksf |
| | High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 7.232 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| **Other** | Bar/Lounge | 194 | Trips |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 273<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,902** | **Daily Vehicle Trips** | **4,902** | **Daily Vehicle Trips** |
| **34,132** | **Daily VMT** | **34,132** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **10** | **Work VMT per Employee** | **10** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 766 | -1.6% | 754 | 8.6 | 6,588 | 6,484 |
| Home-Based Work Attraction | 399 | -15.5% | 337 | 8.1 | 3,232 | 2,730 |
| Home-Based Other Attraction | 3,435 | -11.0% | 3,057 | 6.4 | 21,984 | 19,565 |
| Non-Home Based Other Attraction | 766 | -1.6% | 754 | 7.1 | 5,439 | 5,353 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 754 | 6,484 | 0.0% | 754 | 6,484 |
| Home-Based Work Attraction | 0.0% | 337 | 2,730 | 0.0% | 337 | 2,730 |
| Home-Based Other Attraction | 0.0% | 3,057 | 19,565 | 0.0% | 3,057 | 19,565 |
| Non-Home Based Other Attraction | 0.0% | 754 | 5,353 | 0.0% | 754 | 5,353 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 273
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,730** | **2,730** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **10.0** | **10.0** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| You, the User | |
|---|---|
| By: |  |
| Print Name: | Jason Shender, AICP |
| Title: | Transportation Planner III |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 600 S. Lake Avenue, Suite 500<br>Pasadena, CA 91106 |
| Phone: | (626) 796-2322 |
| Email Address: | jshender@llgengineers.com |
| Date: | 3/28/2023 |

# APPENDIX E

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

## LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2022, level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of incidents, and when there are no other vehicles on the road. Only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for Signalized Intersections

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

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

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

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

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

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

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

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

## LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2022, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

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

Level of Service Criteria for TWSC/AWSC Intersections

| Level of Service | Average Control Delay (Sec/Veh) |
|---|---|
| A | ≤ 10 |
| B | > 10 and ≤ 15 |
| C | > 15 and ≤ 25 |
| D | > 25 and ≤ 35 |
| E | > 35 and ≤ 50 |
| F | > 50 |

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

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

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

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

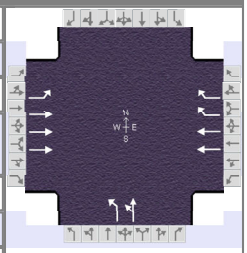
**LOS D** describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

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

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

# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 618 | | | 110 | 115 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.6 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.27 | | | | | 0.00 | | |

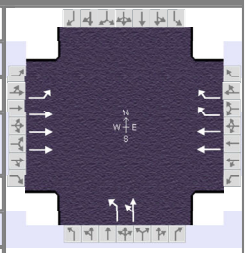
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 694 | | | 124 | 129 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 6.8 | | | 2.3 | 3.0 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.240 | | | 0.095 | 0.126 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 117.2 | | | 44.7 | 47.6 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.7 | | | 1.8 | 1.9 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.5 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.7 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.7 | B | | 21.5 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.7 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.92 | A | 0.70 | A | 1.40 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 87 | 633 | | | 110 | 134 | 477 | 16 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 6.8 | | | | | 18.1 | | |
| Green Extension Time ( $g_e$ ), s | 2.7 | 0.0 | | 0.0 | | 1.0 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.28 | | | | | 0.00 | | |

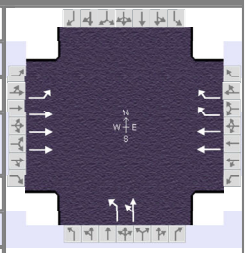
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 98 | 711 | | | 124 | 151 | 359 | 195 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 4.8 | 7.0 | | | 2.3 | 3.6 | 16.1 | 7.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.8 | 7.0 | | | 2.3 | 3.6 | 16.1 | 7.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.338 | 0.245 | | | 0.095 | 0.147 | 0.567 | 0.306 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 98.5 | 120.4 | | | 44.7 | 55.9 | 277.8 | 147.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | 4.8 | | | 1.8 | 2.2 | 11.1 | 5.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.3 | 11.2 | | | 21.2 | 21.6 | 26.4 | 23.7 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.2 | | | 0.1 | 0.3 | 0.8 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.0 | 11.4 | | | 21.3 | 21.9 | 27.1 | 23.8 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 14.6 | B | | 21.7 | C | | 25.9 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 19.6 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.93 | A | 0.71 | A | 1.40 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 786 | | | 119 | 218 | 517 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.7 | | | | | 19.8 | | |
| Green Extension Time ( $g_e$ ), s | 3.2 | 0.0 | | 0.0 | | 1.1 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.44 | | | | | 0.00 | | |

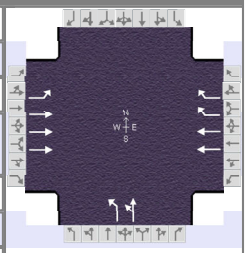
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 115 | 883 | | | 134 | 245 | 389 | 211 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.7 | 9.1 | | | 2.5 | 6.0 | 17.8 | 8.5 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.7 | 9.1 | | | 2.5 | 6.0 | 17.8 | 8.5 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.396 | 0.305 | | | 0.103 | 0.239 | 0.615 | 0.331 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 116.9 | 155.6 | | | 48.4 | 94.6 | 304.2 | 161.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.7 | 6.2 | | | 1.9 | 3.8 | 12.2 | 6.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.7 | 11.7 | | | 21.3 | 22.4 | 26.9 | 23.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.9 | 0.3 | | | 0.2 | 0.5 | 1.3 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.5 | 11.9 | | | 21.4 | 23.0 | 28.2 | 24.0 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 15.0 | B | | 22.4 | C | | 26.7 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 20.0 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.04 | A | 0.80 | A | 1.48 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.89 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 801 | | | 119 | 237 | 517 | 17 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 7.7 | | | | | 19.8 | | |
| Green Extension Time ( $g_e$ ), s | 3.2 | 0.0 | | 0.0 | | 1.1 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 0.45 | | | | | 0.00 | | |

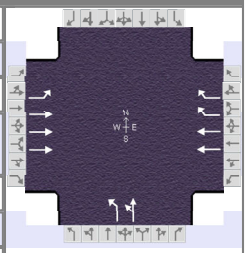
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 115 | 900 | | | 134 | 266 | 389 | 211 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1818 | | | | |
| Queue Service Time ( $g_s$ ), s | 5.7 | 9.3 | | | 2.5 | 6.6 | 17.8 | 8.5 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.7 | 9.3 | | | 2.5 | 6.6 | 17.8 | 8.5 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 636 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 0.396 | 0.311 | | | 0.103 | 0.260 | 0.615 | 0.331 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 116.9 | 159.4 | | | 48.4 | 103.8 | 304.2 | 161.1 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.7 | 6.4 | | | 1.9 | 4.2 | 12.2 | 6.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 37.7 | 11.7 | | | 21.3 | 22.6 | 26.9 | 23.9 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 0.9 | 0.3 | | | 0.2 | 0.6 | 1.3 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 38.5 | 12.0 | | | 21.4 | 23.2 | 28.2 | 24.0 | | | | |
| Level of Service (LOS) | D | B | | | C | C | C | C | | | | |
| Approach Delay, s/veh / LOS | 15.0 | B | | 22.6 | C | | 26.7 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 20.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 1.05 | A | 0.82 | A | 1.48 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 208 | | | 283 | 834 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

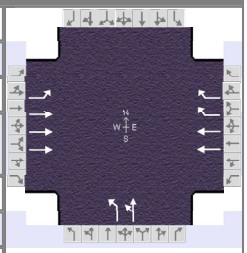
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 217 | | | 295 | 869 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 1.9 | | | 5.7 | 28.1 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.075 | | | 0.226 | 0.847 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 33 | | | 112.4 | 400.5 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.3 | | | 4.5 | 16.0 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.5 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 8.6 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 38.1 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 79.1 | E | | 34.2 | C | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.78 | A | 1.45 | A | 1.06 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 307 | 230 | | | 283 | 860 | 305 | 29 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | |
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 10.7 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.6 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

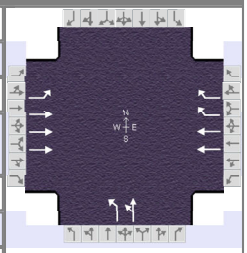
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 320 | 240 | | | 295 | 896 | 213 | 135 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1830 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.1 | | | 5.7 | 29.3 | 8.7 | 5.2 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.1 | | | 5.7 | 29.3 | 8.7 | 5.2 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.105 | 0.083 | | | 0.226 | 0.873 | 0.336 | 0.211 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 523.4 | 36.6 | | | 112.4 | 421.1 | 163 | 98.4 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 20.9 | 1.5 | | | 4.5 | 16.8 | 6.5 | 3.9 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.1 | | | 22.3 | 29.9 | 23.9 | 22.8 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 83.9 | 0.1 | | | 0.4 | 10.2 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 125.9 | 10.2 | | | 22.7 | 40.1 | 24.1 | 22.9 | | | | |
| Level of Service (LOS) | F | B | | | C | D | C | C | | | | |
| Approach Delay, s/veh / LOS | 76.3 | E | | 35.8 | D | | 23.6 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 44.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.80 | A | 1.47 | A | 1.06 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 344 | 267 | | | 438 | 1051 | 344 | 31 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.9 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

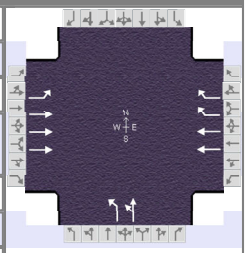
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 358 | 278 | | | 456 | 1095 | 240 | 151 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.5 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.5 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.238 | 0.096 | | | 0.350 | 1.067 | 0.379 | 0.235 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 680.5 | 42.9 | | | 183.4 | 680.1 | 187.2 | 110.8 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 27.2 | 1.7 | | | 7.3 | 27.2 | 7.5 | 4.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.2 | | | 23.4 | 32.0 | 24.4 | 23.0 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 133.0 | 0.1 | | | 0.7 | 47.8 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 175.0 | 10.3 | | | 24.2 | 79.8 | 24.5 | 23.1 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 103.0 | F | | 63.4 | E | | 24.0 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 67.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.84 | A | 1.77 | B | 1.13 | A | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.96 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | CdC/US-101 NB Ramps | File Name | 01PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 344 | 289 | | | 438 | 1077 | 344 | 31 | | | | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 36.0 | 16.0 | 35.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | |
| Case Number | 2.0 | 4.0 | | 7.4 | | 10.0 | | |
| Phase Duration, s | 20.0 | 60.0 | | 40.0 | | 40.0 | | |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 4.0 | | 4.0 | | 5.0 | | |
| Max Allow Headway ( *MAH* ), s | 4.3 | 0.0 | | 0.0 | | 3.1 | | |
| Queue Clearance Time ( $g_s$ ), s | 18.0 | | | | | 11.9 | | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | | 0.0 | | 0.7 | | |
| Phase Call Probability | 1.00 | | | | | 1.00 | | |
| Max Out Probability | 1.00 | | | | | 0.00 | | |

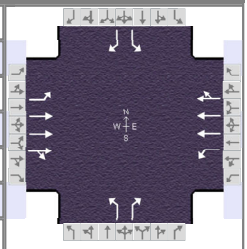
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | | | 2 | 12 | 7 | 4 | | | | |
| Adjusted Flow Rate ( *v* ), veh/h | 358 | 301 | | | 456 | 1122 | 240 | 151 | | | | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1725 | | | 1809 | 1425 | 1810 | 1829 | | | | |
| Queue Service Time ( $g_s$ ), s | 16.0 | 2.7 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 16.0 | 2.7 | | | 9.2 | 36.0 | 9.9 | 5.8 | | | | |
| Green Ratio ( *g/C* ) | 0.16 | 0.56 | | | 0.36 | 0.36 | 0.35 | 0.35 | | | | |
| Capacity ( *c* ), veh/h | 290 | 2898 | | | 1302 | 1026 | 633 | 640 | | | | |
| Volume-to-Capacity Ratio ( *X* ) | 1.238 | 0.104 | | | 0.350 | 1.093 | 0.379 | 0.235 | | | | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 680.5 | 46.7 | | | 183.4 | 732.6 | 187.2 | 110.8 | | | | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 27.2 | 1.9 | | | 7.3 | 29.3 | 7.5 | 4.4 | | | | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | | | | |
| Uniform Delay ( $d_1$ ), s/veh | 42.0 | 10.3 | | | 23.4 | 32.0 | 24.4 | 23.0 | | | | |
| Incremental Delay ( $d_2$ ), s/veh | 133.0 | 0.1 | | | 0.7 | 57.2 | 0.1 | 0.1 | | | | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Control Delay ( *d* ), s/veh | 175.0 | 10.3 | | | 24.2 | 89.2 | 24.5 | 23.1 | | | | |
| Level of Service (LOS) | F | B | | | C | F | C | C | | | | |
| Approach Delay, s/veh / LOS | 99.8 | F | | 70.4 | E | | 24.0 | C | | 0.0 | | |
| Intersection Delay, s/veh / LOS | 70.9 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.66 | B | 1.72 | B | 2.61 | C | 2.47 | B |
| Bicycle LOS Score / LOS | 0.85 | A | 1.79 | B | 1.13 | A | | |

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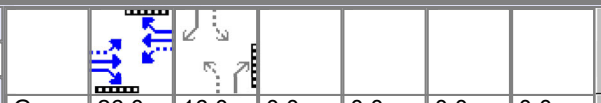
# HCS Signalized Intersection Results Summary

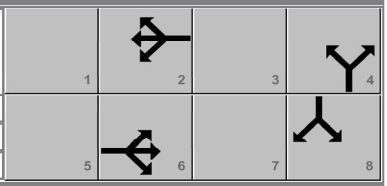
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 559 | 11 | 5 | 196 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

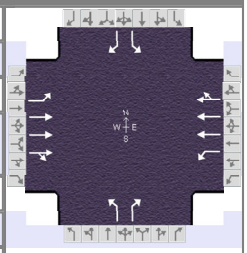
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 465 | 231 | 6 | 163 | 81 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1154 | 1900 | 1880 | 761 | 1900 | 1880 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.5 | 3.3 | 3.4 | 0.2 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | 3.3 | 3.4 | 3.6 | 1.1 | 1.1 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 719 | 1976 | 978 | 489 | 1976 | 977 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.093 | 0.235 | 0.236 | 0.012 | 0.082 | 0.083 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.1 | 51.1 | 54.2 | 1.6 | 16.3 | 17.2 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.0 | 2.2 | 0.1 | 0.7 | 0.7 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.5 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 6.9 | 6.8 | 7.1 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.91 | A | 0.63 | A | | F | | F |

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# HCS Signalized Intersection Results Summary

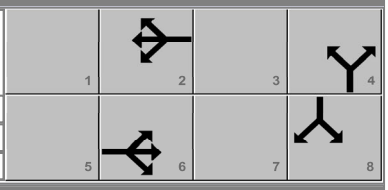
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 55 | 574 | 11 | 5 | 215 | 4 | 9 | | 6 | 14 | | 32 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |  |
|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.8 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

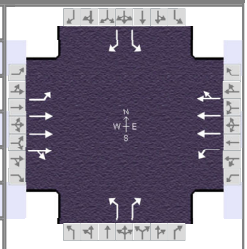
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 67 | 477 | 237 | 6 | 178 | 89 | 11 | | 7 | 17 | | 39 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1130 | 1900 | 1881 | 749 | 1900 | 1881 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 1.6 | 3.4 | 3.5 | 0.2 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.8 | 3.4 | 3.5 | 3.7 | 1.2 | 1.2 | 0.2 | | 0.2 | 0.3 | | 0.8 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 705 | 1976 | 978 | 482 | 1976 | 978 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.095 | 0.241 | 0.242 | 0.013 | 0.090 | 0.091 | 0.015 | | 0.014 | 0.024 | | 0.076 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 16.2 | 52.4 | 55.7 | 1.7 | 17.9 | 19 | 3.4 | | 2.3 | 5.3 | | 12.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 2.1 | 2.2 | 0.1 | 0.7 | 0.8 | 0.1 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 6.7 | 6.6 | 6.6 | 7.6 | 6.0 | 6.0 | 11.6 | | 11.6 | 11.7 | | 11.8 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 0.3 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.0 | 6.9 | 7.2 | 7.6 | 6.1 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.0 | A | | 6.2 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.92 | A | 0.64 | A | | F | | F |

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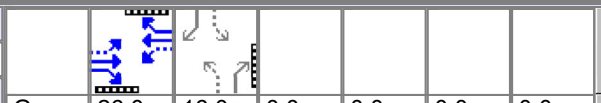
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

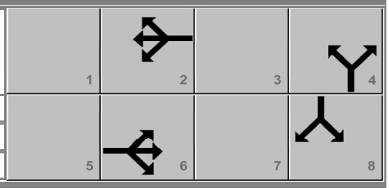


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 59 | 722 | 12 | 5 | 306 | 4 | 10 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

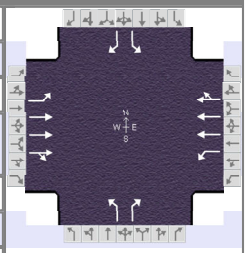
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 72 | 598 | 297 | 6 | 252 | 126 | 12 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1021 | 1900 | 1883 | 632 | 1900 | 1887 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 4.5 | 4.5 | 0.3 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.7 | 4.5 | 4.5 | 4.8 | 1.7 | 1.7 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 640 | 1976 | 979 | 416 | 1976 | 981 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.112 | 0.303 | 0.303 | 0.015 | 0.128 | 0.128 | 0.017 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18.5 | 68.4 | 72.9 | 1.8 | 25.9 | 27.5 | 3.8 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.7 | 2.9 | 0.1 | 1.0 | 1.1 | 0.2 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 7.1 | 6.8 | 6.8 | 8.2 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.4 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.5 | 7.2 | 7.6 | 8.3 | 6.3 | 6.4 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.4 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.4 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.02 | A | 0.70 | A | | F | | F |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.82 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | MTA Dwy/CdC Way | File Name | 02AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 59 | 737 | 12 | 5 | 325 | 4 | 10 | | 6 | 15 | | 34 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 2.9 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.1 | | 0.1 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

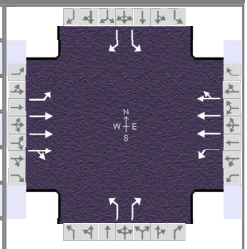
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 72 | 610 | 303 | 6 | 268 | 133 | 12 | | 7 | 18 | | 41 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 999 | 1900 | 1884 | 621 | 1900 | 1888 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 4.6 | 4.6 | 0.3 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 4.6 | 4.6 | 4.9 | 1.8 | 1.8 | 0.2 | | 0.2 | 0.3 | | 0.9 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 627 | 1976 | 980 | 410 | 1976 | 982 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.115 | 0.309 | 0.309 | 0.015 | 0.136 | 0.136 | 0.017 | | 0.014 | 0.025 | | 0.080 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 18.7 | 70.3 | 74.8 | 1.8 | 27.5 | 29.2 | 3.8 | | 2.3 | 5.7 | | 13.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.7 | 2.8 | 3.0 | 0.1 | 1.1 | 1.2 | 0.2 | | 0.1 | 0.2 | | 0.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 7.2 | 6.9 | 6.9 | 8.3 | 6.2 | 6.2 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.4 | 0.4 | 0.8 | 0.1 | 0.1 | 0.3 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 7.6 | 7.3 | 7.7 | 8.3 | 6.3 | 6.5 | 11.6 | | 11.6 | 11.7 | | 11.9 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 7.4 | A | | 6.4 | A | | 11.6 | B | | 11.8 | B | |
| Intersection Delay, s/veh / LOS | 7.4 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 1.03 | A | 0.71 | A | | F | | F |

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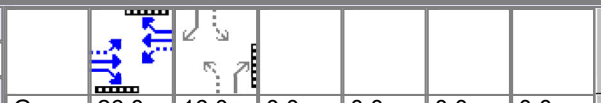
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

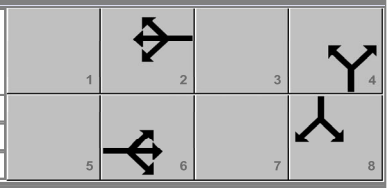


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 161 | 12 | 4 | 959 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

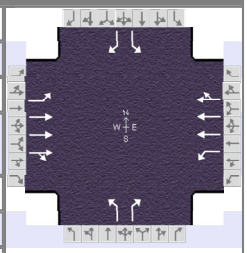
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 126 | 62 | 4 | 696 | 348 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 549 | 1900 | 1831 | 1214 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.0 | 0.8 | 0.8 | 0.1 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.4 | 0.8 | 0.8 | 0.9 | 5.4 | 5.4 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 371 | 1976 | 952 | 755 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.094 | 0.064 | 0.065 | 0.006 | 0.352 | 0.352 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.5 | 12.4 | 13.2 | 1 | 82.6 | 88.7 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.5 | 0.5 | 0.0 | 3.3 | 3.5 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.2 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.7 | 6.0 | 6.1 | 6.2 | 7.5 | 8.0 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.7 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.61 | A | 1.06 | A | | F | | F |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 32 | 183 | 12 | 4 | 985 | 1 | 11 | | 4 | 19 | | 155 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.0 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

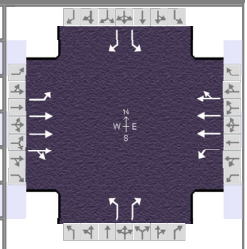
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 35 | 142 | 70 | 4 | 715 | 357 | 12 | | 4 | 21 | | 168 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 535 | 1900 | 1839 | 1188 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 2.1 | 0.9 | 1.0 | 0.1 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 7.6 | 0.9 | 1.0 | 1.0 | 5.6 | 5.6 | 0.2 | | 0.1 | 0.4 | | 4.0 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 363 | 1976 | 956 | 739 | 1976 | 987 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.096 | 0.072 | 0.073 | 0.006 | 0.362 | 0.362 | 0.017 | | 0.008 | 0.029 | | 0.327 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 11.6 | 14.1 | 14.9 | 1 | 85.4 | 91.7 | 3.7 | | 1.3 | 6.4 | | 58.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.5 | 0.6 | 0.6 | 0.0 | 3.4 | 3.7 | 0.1 | | 0.1 | 0.3 | | 2.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 9.3 | 6.0 | 6.0 | 6.2 | 7.1 | 7.1 | 11.6 | | 11.6 | 11.7 | | 12.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.1 | 0.1 | 0.0 | 0.5 | 1.0 | 0.0 | | 0.0 | 0.0 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 9.9 | 6.1 | 6.1 | 6.3 | 7.6 | 8.1 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Level of Service (LOS) | A | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.6 | A | | 7.8 | A | | 11.6 | B | | 12.9 | B | |
| Intersection Delay, s/veh / LOS | 8.3 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.62 | A | 1.08 | A | | F | | F |

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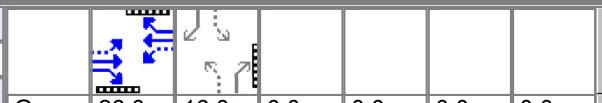
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

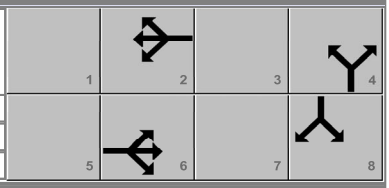


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 217 | 13 | 4 | 1320 | 1 | 12 | | 4 | 20 | | 166 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.3 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

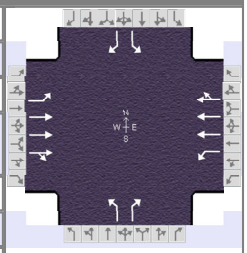
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 167 | 83 | 4 | 957 | 478 | 13 | | 4 | 22 | | 180 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 378 | 1900 | 1843 | 1148 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.5 | 1.1 | 1.1 | 0.1 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.6 | 1.1 | 1.1 | 1.2 | 8.1 | 8.1 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 279 | 1976 | 959 | 715 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.132 | 0.085 | 0.086 | 0.006 | 0.485 | 0.484 | 0.018 | | 0.008 | 0.030 | | 0.350 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 14.9 | 16.7 | 17.7 | 1 | 125.4 | 135.8 | 4 | | 1.3 | 6.8 | | 62.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.7 | 0.0 | 5.0 | 5.4 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.4 | 6.0 | 6.0 | 6.3 | 7.7 | 7.7 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 1.0 | 0.1 | 0.2 | 0.0 | 0.9 | 1.7 | 0.0 | | 0.0 | 0.0 | | 0.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.4 | 6.1 | 6.2 | 6.4 | 8.6 | 9.4 | 11.6 | | 11.6 | 11.7 | | 13.2 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.8 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.0 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.65 | A | 1.28 | A | | F | | F |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Campo de Cahuenga Way | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | MTA Dwy/CdC Way | File Name | 02PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 34 | 239 | 13 | 4 | 1346 | 1 | 12 | | 4 | 20 | | 166 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 50.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 26.0 | 16.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 6 | | 2 | | 4 | | 8 |
| Case Number | | 6.0 | | 6.0 | | 5.0 | | 5.0 |
| Phase Duration, s | | 30.0 | | 30.0 | | 20.0 | | 20.0 |
| Change Period, ( $Y+R_c$ ), s | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | 0.0 | | 0.0 | | 3.4 | | 3.4 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | 2.2 | | 6.3 |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 0.0 | | 0.4 | | 0.3 |
| Phase Call Probability | | | | | | 1.00 | | 1.00 |
| Max Out Probability | | | | | | 0.00 | | 0.00 |

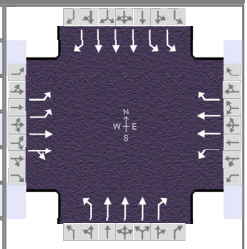
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | | 14 | 3 | | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 37 | 183 | 91 | 4 | 976 | 488 | 13 | | 4 | 22 | | 180 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 368 | 1900 | 1848 | 1123 | 1900 | 1899 | 1810 | | 1610 | 1810 | | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.6 | 1.2 | 1.2 | 0.1 | 8.3 | 8.3 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.9 | 1.2 | 1.2 | 1.3 | 8.3 | 8.3 | 0.2 | | 0.1 | 0.4 | | 4.3 |
| Green Ratio ( *g/C* ) | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.52 | 0.32 | | 0.32 | 0.32 | | 0.32 |
| Capacity ( *c* ), veh/h | 274 | 1976 | 961 | 700 | 1976 | 988 | 723 | | 515 | 723 | | 515 |
| Volume-to-Capacity Ratio ( *X* ) | 0.135 | 0.093 | 0.094 | 0.006 | 0.494 | 0.494 | 0.018 | | 0.008 | 0.030 | | 0.350 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 15.1 | 18.4 | 19.5 | 1 | 128.7 | 139.5 | 4 | | 1.3 | 6.8 | | 62.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 0.6 | 0.7 | 0.8 | 0.0 | 5.1 | 5.6 | 0.2 | | 0.1 | 0.3 | | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 11.6 | 6.1 | 6.1 | 6.4 | 7.8 | 7.8 | 11.6 | | 11.6 | 11.7 | | 13.0 |
| Incremental Delay ( $d_2$ ), s/veh | 1.0 | 0.1 | 0.2 | 0.0 | 0.9 | 1.8 | 0.0 | | 0.0 | 0.0 | | 0.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 12.6 | 6.1 | 6.3 | 6.4 | 8.6 | 9.5 | 11.6 | | 11.6 | 11.7 | | 13.2 |
| Level of Service (LOS) | B | A | A | A | A | A | B | | B | B | | B |
| Approach Delay, s/veh / LOS | 6.9 | A | | 8.9 | A | | 11.6 | B | | 13.0 | B | |
| Intersection Delay, s/veh / LOS | 9.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.91 | B | 1.91 | B | 2.56 | C | 2.55 | C |
| Bicycle LOS Score / LOS | 0.66 | A | 1.30 | A | | F | | F |

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# HCS Signalized Intersection Results Summary

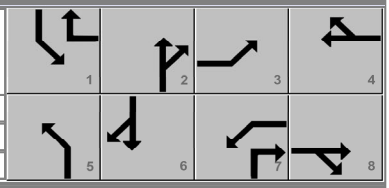
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 336 | 22 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.1 | 4.5 | 6.9 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.00 | 0.14 | 0.00 | | 1.00 | |

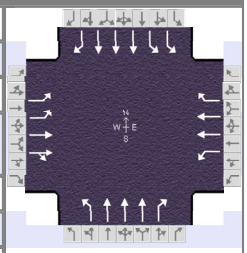
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 180 | 178 | 49 | 65 | 106 | 46 | 1223 | 278 | 760 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1859 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.0 | 9.1 | 2.5 | 1.6 | 4.9 | 2.2 | 19.7 | 11.0 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.692 | 0.698 | 0.244 | 0.131 | 0.220 | 0.158 | 0.651 | 0.364 | 1.335 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 206.6 | 205.6 | 50.5 | 31.9 | 86.1 | 43.2 | 318.8 | 186.6 | 763.3 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.3 | 8.2 | 2.0 | 1.3 | 3.4 | 1.7 | 12.8 | 7.5 | 30.5 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.1 | 41.2 | 40.6 | 37.9 | 26.3 | 36.1 | 26.6 | 16.7 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.4 | 6.9 | 0.2 | 0.0 | 0.1 | 0.1 | 1.8 | 1.3 | 162.4 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 47.6 | 48.1 | 40.8 | 38.0 | 26.4 | 36.2 | 28.3 | 18.1 | 204.3 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 47.3 | D | | 33.0 | C | | 26.7 | C | | 88.4 | F | |
| Intersection Delay, s/veh / LOS | 59.8 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.98 | A | 0.67 | A | 1.34 | A | 1.73 | B |

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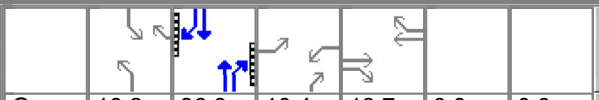
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

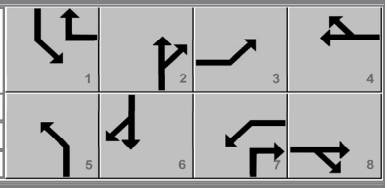


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 241 | 351 | 22 | 56 | 84 | 125 | 46 | 1223 | 312 | 785 | 1379 | 121 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.2 | 3.3 | 3.2 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 8.6 | 11.5 | 4.8 | 7.9 | 4.2 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.4 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 0.01 | 0.26 | 0.00 | | 1.00 | |

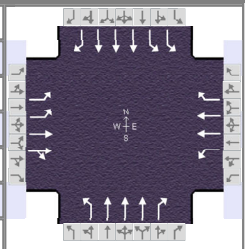
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 241 | 188 | 185 | 56 | 84 | 125 | 46 | 1223 | 312 | 785 | 1379 | 121 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1860 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 6.6 | 9.5 | 9.5 | 2.8 | 2.1 | 5.9 | 2.2 | 19.7 | 12.6 | 16.2 | 23.1 | 5.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 6.6 | 9.5 | 9.5 | 2.8 | 2.1 | 5.9 | 2.2 | 19.7 | 12.6 | 16.2 | 23.1 | 5.2 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 255 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.659 | 0.721 | 0.727 | 0.279 | 0.169 | 0.260 | 0.158 | 0.651 | 0.409 | 1.379 | 0.734 | 0.207 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 137.3 | 217.7 | 216.6 | 58 | 41.4 | 103 | 43.2 | 318.8 | 209.5 | 822.6 | 366.4 | 91.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 5.5 | 8.7 | 8.7 | 2.3 | 1.7 | 4.1 | 1.7 | 12.8 | 8.4 | 32.9 | 14.7 | 3.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.1 | 41.3 | 41.4 | 40.8 | 38.1 | 26.6 | 36.1 | 26.6 | 17.2 | 41.9 | 27.7 | 21.9 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 8.2 | 8.7 | 0.3 | 0.1 | 0.1 | 0.1 | 1.8 | 1.6 | 181.3 | 2.6 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 46.6 | 49.5 | 50.1 | 41.1 | 38.2 | 26.7 | 36.2 | 28.3 | 18.8 | 223.2 | 30.2 | 22.7 |
| Level of Service (LOS) | D | D | D | D | D | C | D | C | B | F | C | C |
| Approach Delay, s/veh / LOS | 48.5 | D | | 33.4 | C | | 26.7 | C | | 96.1 | F | |
| Intersection Delay, s/veh / LOS | 63.3 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 0.71 | A | 1.36 | A | 1.74 | B |

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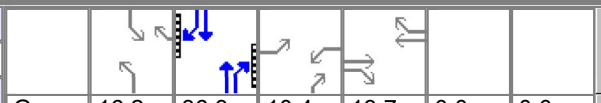
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

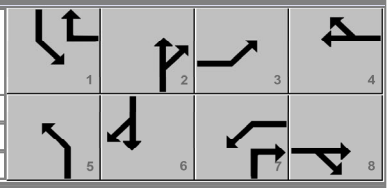


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 302 | 440 | 24 | 185 | 137 | 217 | 51 | 1458 | 563 | 991 | 1508 | 157 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 16.2 | 36.3 | 10.4 | 13.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.4 | 14.2 | 12.1 | 12.9 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

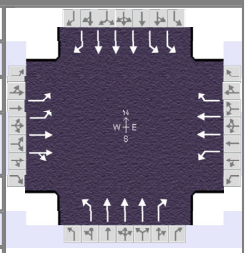
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 302 | 234 | 230 | 185 | 137 | 217 | 51 | 1458 | 563 | 991 | 1508 | 157 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1865 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.4 | 12.1 | 12.2 | 10.1 | 3.4 | 10.9 | 2.4 | 25.0 | 28.3 | 16.2 | 26.2 | 6.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.4 | 12.1 | 12.2 | 10.1 | 3.4 | 10.9 | 2.4 | 25.0 | 28.3 | 16.2 | 26.2 | 6.9 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.826 | 0.897 | 0.902 | 0.921 | 0.276 | 0.451 | 0.175 | 0.776 | 0.738 | 1.741 | 0.803 | 0.269 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 194.8 | 310.3 | 309.8 | 278.3 | 68.6 | 190.6 | 48.1 | 392.7 | 419.7 | 1324.6 | 410.5 | 8.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.8 | 12.4 | 12.4 | 11.1 | 2.7 | 7.6 | 1.9 | 15.7 | 16.8 | 53.0 | 16.4 | 0.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.9 | 42.5 | 42.5 | 44.0 | 38.7 | 28.4 | 36.2 | 28.2 | 21.3 | 41.9 | 28.6 | 22.5 |
| Incremental Delay ( $d_2$ ), s/veh | 13.6 | 29.8 | 31.1 | 41.3 | 0.1 | 0.2 | 0.1 | 3.2 | 6.3 | 340.6 | 3.7 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 57.5 | 72.3 | 73.6 | 85.3 | 38.8 | 28.6 | 36.3 | 31.5 | 27.6 | 382.5 | 32.4 | 23.6 |
| Level of Service (LOS) | E | E | E | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 66.8 | E | | 50.7 | D | | 30.5 | C | | 162.5 | F | |
| Intersection Delay, s/veh / LOS | 95.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.12 | A | 0.93 | A | 1.63 | B | 1.95 | B |

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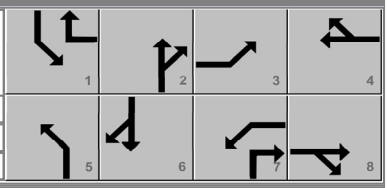
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 1.00 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:30 |
| Intersection | Lankershim/CdC-UHD | File Name | 03AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 302 | 455 | 24 | 192 | 156 | 236 | 51 | 1458 | 597 | 1016 | 1508 | 157 |

| Signal Information | | | | | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 | | | | | | | | | | | | | |
| Offset, s | 0 | Reference Point | Begin | | | | | | | | | | | | | |
| Uncoordinated | No | Simult. Gap E/W | On | Green | 16.2 | 36.3 | | 10.4 | 13.7 | 0.0 | 0.0 | | | | | |
| Force Mode | Fixed | Simult. Gap N/S | On | Yellow | 3.6 | 4.1 | | 3.6 | 3.6 | 0.0 | 0.0 | | | | | |
| | | | | Red | 2.2 | 1.6 | | 2.0 | 2.7 | 0.0 | 0.0 | | | | | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 16.0 | 20.0 | 16.0 | 20.0 | 22.0 | 42.0 | 22.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 10.4 | 14.6 | 12.6 | 14.0 | 4.4 | | 18.2 | |
| Green Extension Time ( $g_e$ ), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | | 1.00 | |

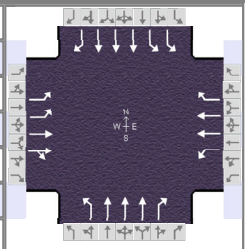
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 302 | 241 | 238 | 192 | 156 | 236 | 51 | 1458 | 597 | 1016 | 1508 | 157 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1866 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 8.4 | 12.5 | 12.6 | 10.6 | 3.9 | 12.0 | 2.4 | 25.0 | 31.0 | 16.2 | 26.2 | 6.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 8.4 | 12.5 | 12.6 | 10.6 | 3.9 | 12.0 | 2.4 | 25.0 | 31.0 | 16.2 | 26.2 | 6.9 |
| Green Ratio ( *g/C* ) | 0.10 | 0.14 | 0.14 | 0.11 | 0.14 | 0.30 | 0.16 | 0.36 | 0.47 | 0.16 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 365 | 260 | 256 | 201 | 496 | 481 | 291 | 1879 | 763 | 569 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.826 | 0.926 | 0.930 | 0.956 | 0.315 | 0.490 | 0.175 | 0.776 | 0.782 | 1.785 | 0.803 | 0.269 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 194.8 | 331.5 | 331 | 301.2 | 78.5 | 205.7 | 48.1 | 392.7 | 459.2 | 1385.9 | 410.5 | 8.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 7.8 | 13.3 | 13.2 | 12.0 | 3.1 | 8.2 | 1.9 | 15.7 | 18.4 | 55.4 | 16.4 | 0.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 43.9 | 42.7 | 42.7 | 44.2 | 38.9 | 28.8 | 36.2 | 28.2 | 22.0 | 41.9 | 28.6 | 22.5 |
| Incremental Delay ( $d_2$ ), s/veh | 13.6 | 36.0 | 37.4 | 50.4 | 0.1 | 0.3 | 0.1 | 3.2 | 7.8 | 360.2 | 3.7 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 57.5 | 78.7 | 80.1 | 94.6 | 39.1 | 29.1 | 36.3 | 31.5 | 29.8 | 402.1 | 32.4 | 23.6 |
| Level of Service (LOS) | E | E | F | F | D | C | D | C | C | F | C | C |
| Approach Delay, s/veh / LOS | 70.9 | E | | 53.3 | D | | 31.1 | C | | 172.0 | F | |
| Intersection Delay, s/veh / LOS | 99.7 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.73 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 1.13 | A | 0.97 | A | 1.65 | B | 1.96 | B |

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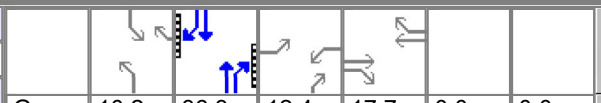
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

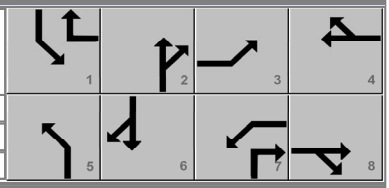


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 37 | 43 | 146 | 393 | 423 | 178 | 1233 | 130 | 150 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | 4.5 | 10.4 | 19.7 | 12.1 | | 6.4 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 2.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.04 | 1.00 | 1.00 | 1.00 | | 0.41 | |

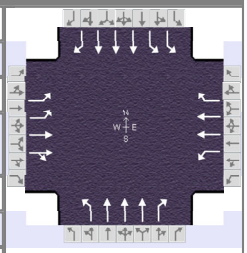
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 40 | 47 | 159 | 427 | 460 | 193 | 1340 | 141 | 163 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1610 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 1.8 | 2.5 | 8.4 | 11.0 | 17.7 | 10.1 | 22.3 | 4.9 | 4.4 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 285 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.120 | 0.164 | 0.669 | 0.667 | 1.023 | 1.059 | 0.713 | 0.178 | 0.455 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 37.5 | 44.1 | 185.2 | 219.4 | 597.4 | 344.5 | 354.1 | 81 | 84.7 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 1.5 | 1.8 | 7.4 | 8.8 | 23.9 | 13.8 | 14.2 | 3.2 | 3.4 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.0 | 34.6 | 34.9 | 41.4 | 38.4 | 36.1 | 45.0 | 27.4 | 14.0 | 42.3 | 25.7 | 29.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 5.8 | 2.2 | 48.6 | 82.9 | 2.3 | 0.5 | 0.3 | 1.3 | 15.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 34.7 | 35.0 | 47.2 | 40.6 | 84.6 | 127.9 | 29.7 | 14.5 | 42.6 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | C | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.2 | D | | 60.9 | E | | 39.8 | D | | 33.6 | C | |
| Intersection Delay, s/veh / LOS | 42.1 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.68 | A | 1.35 | A | 1.41 | A | 1.46 | A |

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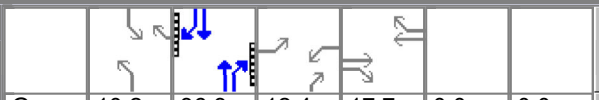
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

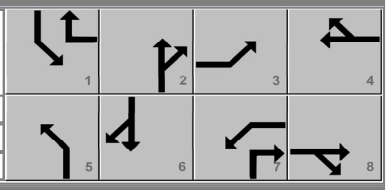


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 135 | 59 | 43 | 157 | 419 | 449 | 178 | 1233 | 180 | 186 | 1007 | 463 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.3 | 3.3 | 3.3 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | 4.8 | 11.0 | 19.7 | 12.1 | | 7.5 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 2.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.02 | 0.06 | 1.00 | 1.00 | 1.00 | | 1.00 | |

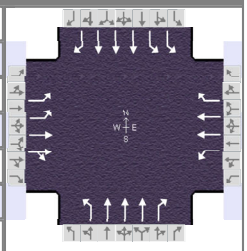
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 147 | 56 | 55 | 171 | 455 | 488 | 193 | 1340 | 196 | 202 | 1095 | 503 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1646 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 3.8 | 2.5 | 2.8 | 9.0 | 11.9 | 17.7 | 10.1 | 22.3 | 7.0 | 5.5 | 17.1 | 29.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 2.5 | 2.8 | 9.0 | 11.9 | 17.7 | 10.1 | 22.3 | 7.0 | 5.5 | 17.1 | 29.0 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 291 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.337 | 0.168 | 0.187 | 0.720 | 0.711 | 1.086 | 1.059 | 0.713 | 0.246 | 0.564 | 0.583 | 0.861 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 75.2 | 53.1 | 51.6 | 203.8 | 234.9 | 690.7 | 344.5 | 354.1 | 116.9 | 108.1 | 282.5 | 477.6 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.0 | 2.1 | 2.1 | 8.2 | 9.4 | 27.6 | 13.8 | 14.2 | 4.7 | 4.3 | 11.3 | 19.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.0 | 34.9 | 35.0 | 41.7 | 38.7 | 36.1 | 45.0 | 27.4 | 14.6 | 42.8 | 25.7 | 29.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 8.8 | 3.2 | 67.8 | 82.9 | 2.3 | 0.7 | 1.3 | 1.3 | 15.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.2 | 35.0 | 35.1 | 50.5 | 41.9 | 103.8 | 127.9 | 29.7 | 15.3 | 44.1 | 27.1 | 44.8 |
| Level of Service (LOS) | D | C | D | D | D | F | F | C | B | D | C | D |
| Approach Delay, s/veh / LOS | 38.0 | D | | 70.4 | E | | 39.1 | D | | 33.9 | C | |
| Intersection Delay, s/veh / LOS | 44.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.70 | A | 1.41 | A | 1.44 | A | 1.48 | A |

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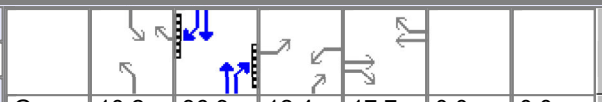
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

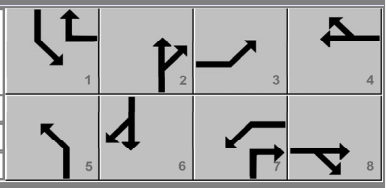


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 160 | 71 | 46 | 293 | 541 | 696 | 191 | 1380 | 301 | 311 | 1218 | 668 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.6 | 5.2 | 15.1 | 19.7 | 12.1 | | 11.6 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.05 | 0.19 | 1.00 | 1.00 | 1.00 | | 1.00 | |

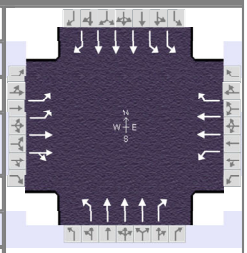
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 174 | 65 | 62 | 318 | 588 | 757 | 208 | 1500 | 327 | 338 | 1324 | 726 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1661 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.6 | 2.9 | 3.2 | 13.1 | 16.0 | 17.7 | 10.1 | 26.0 | 12.9 | 9.6 | 21.9 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.6 | 2.9 | 3.2 | 13.1 | 16.0 | 17.7 | 10.1 | 26.0 | 12.9 | 9.6 | 21.9 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 294 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.399 | 0.192 | 0.213 | 1.344 | 0.918 | 1.684 | 1.136 | 0.798 | 0.411 | 0.943 | 0.705 | 1.242 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.8 | 61.2 | 59.5 | 691.3 | 338.2 | 1909.8 | 395.8 | 407.8 | 211.1 | 240.7 | 349.1 | 1225.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | 2.4 | 2.4 | 27.7 | 13.5 | 76.4 | 15.8 | 16.3 | 8.4 | 9.6 | 14.0 | 49.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.4 | 35.1 | 35.2 | 43.5 | 40.4 | 36.1 | 45.0 | 28.6 | 16.1 | 44.6 | 27.3 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.1 | 180.1 | 18.0 | 317.4 | 107.9 | 3.6 | 1.6 | 32.7 | 2.2 | 123.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.6 | 35.2 | 35.3 | 223.5 | 58.5 | 353.4 | 152.8 | 32.2 | 17.6 | 77.3 | 29.5 | 154.9 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | E | C | F |
| Approach Delay, s/veh / LOS | 38.3 | D | | 224.3 | F | | 42.2 | D | | 74.4 | E | |
| Intersection Delay, s/veh / LOS | 101.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.74 | A | 1.86 | B | 1.61 | B | 1.80 | B |

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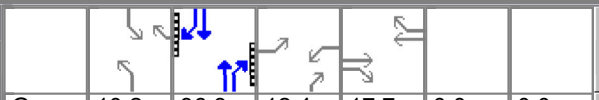
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/CdC-UHD | File Name | 03PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

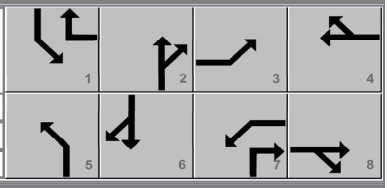


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 160 | 93 | 46 | 304 | 567 | 722 | 191 | 1380 | 351 | 347 | 1218 | 668 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | Begin |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 10.2 | 36.3 | 12.4 | 17.7 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 3.6 | 3.6 | 0.0 | 0.0 |
| Red | 2.2 | 1.6 | 2.0 | 2.7 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 3 | 8 | 7 | 4 | 5 | 2 | 1 | 6 |
| Case Number | 2.0 | 4.0 | 2.0 | 3.0 | 2.0 | 3.0 | 2.0 | 3.0 |
| Phase Duration, s | 18.0 | 24.0 | 18.0 | 24.0 | 16.0 | 42.0 | 16.0 | 42.0 |
| Change Period, ( $Y+R_c$ ), s | 5.6 | 6.3 | 4.9 | 6.3 | 5.9 | 5.7 | 5.8 | 5.7 |
| Max Allow Headway ( *MAH* ), s | 3.3 | 3.4 | 3.3 | 3.4 | 3.1 | 0.0 | 3.1 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | 6.6 | 5.8 | 15.1 | 19.7 | 12.1 | | 12.2 | |
| Green Extension Time ( $g_e$ ), s | 0.2 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | |
| Max Out Probability | 0.05 | 0.23 | 1.00 | 1.00 | 1.00 | | 1.00 | |

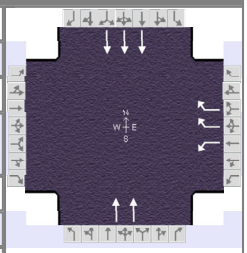
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 3 | 8 | 18 | 7 | 4 | 14 | 5 | 2 | 12 | 1 | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 174 | 77 | 74 | 330 | 616 | 785 | 208 | 1500 | 382 | 377 | 1324 | 726 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1695 | 1810 | 1809 | 1610 | 1810 | 1725 | 1610 | 1757 | 1725 | 1610 |
| Queue Service Time ( $g_s$ ), s | 4.6 | 3.5 | 3.8 | 13.1 | 16.9 | 17.7 | 10.1 | 26.0 | 15.7 | 10.2 | 21.9 | 36.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.6 | 3.5 | 3.8 | 13.1 | 16.9 | 17.7 | 10.1 | 26.0 | 15.7 | 10.2 | 21.9 | 36.3 |
| Green Ratio ( *g/C* ) | 0.12 | 0.18 | 0.18 | 0.13 | 0.18 | 0.28 | 0.10 | 0.36 | 0.49 | 0.10 | 0.36 | 0.36 |
| Capacity ( *c* ), veh/h | 436 | 336 | 300 | 237 | 640 | 449 | 183 | 1879 | 795 | 358 | 1879 | 584 |
| Volume-to-Capacity Ratio ( *X* ) | 0.399 | 0.228 | 0.248 | 1.394 | 0.963 | 1.747 | 1.136 | 0.798 | 0.480 | 1.052 | 0.705 | 1.242 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.8 | 73.2 | 71.1 | 746.2 | 374.4 | 2046.8 | 395.8 | 407.8 | 247.9 | 303.7 | 349.1 | 1225.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | 2.9 | 2.8 | 29.8 | 15.0 | 81.9 | 15.8 | 16.3 | 9.9 | 12.1 | 14.0 | 49.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 40.4 | 35.3 | 35.4 | 43.5 | 40.8 | 36.1 | 45.0 | 28.6 | 16.8 | 44.9 | 27.3 | 31.9 |
| Incremental Delay ( $d_2$ ), s/veh | 0.2 | 0.1 | 0.2 | 201.0 | 26.3 | 345.2 | 107.9 | 3.6 | 2.1 | 61.9 | 2.2 | 123.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 40.6 | 35.4 | 35.6 | 244.4 | 67.1 | 381.3 | 152.8 | 32.2 | 18.8 | 106.8 | 29.5 | 154.9 |
| Level of Service (LOS) | D | D | D | F | E | F | F | C | B | F | C | F |
| Approach Delay, s/veh / LOS | 38.2 | D | | 243.3 | F | | 41.8 | D | | 79.0 | E | |
| Intersection Delay, s/veh / LOS | 108.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.72 | C | 2.85 | C | 2.46 | B | 2.46 | B |
| Bicycle LOS Score / LOS | 0.76 | A | 1.92 | B | 1.64 | B | 1.82 | B |

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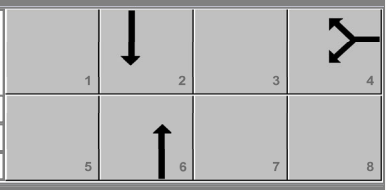
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 772 | | 388 | | | 1857 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.5 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.15 | | | | |

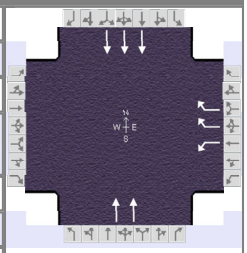
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 813 | | 408 | | | 1955 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 25.5 | | 5.6 | | | 26.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.792 | | 0.202 | | | 0.674 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 344.6 | | 97 | | | 375.9 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 13.8 | | 3.9 | | | 15.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.6 | | 10.9 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.0 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 32.6 | | 11.1 | | | 16.8 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.7 | | C | 11.1 | | B | 16.8 | | B |
| Intersection Delay, s/veh / LOS | 20.2 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.82 | A | 1.56 | B |

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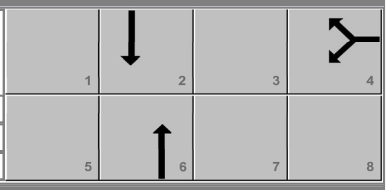
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 70 | | 787 | | 408 | | | 1864 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.20 | | | | |

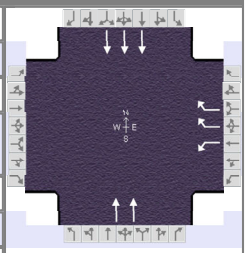
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 74 | | 828 | | 429 | | | 1962 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.7 | | 26.2 | | 5.9 | | | 26.9 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.7 | | 26.2 | | 5.9 | | | 26.9 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.113 | | 0.807 | | 0.212 | | | 0.677 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 50.9 | | 354.5 | | 102.9 | | | 377.7 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.0 | | 14.2 | | 4.1 | | | 15.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.3 | | 28.9 | | 11.0 | | | 15.6 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 4.5 | | 0.2 | | | 1.3 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 33.4 | | 11.2 | | | 16.9 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.4 | | C | 11.2 | | B | 16.9 | | B |
| Intersection Delay, s/veh / LOS | 20.4 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.84 | A | 1.57 | B |

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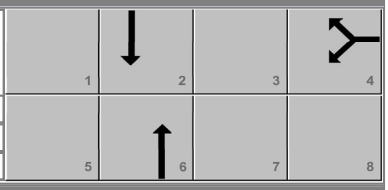
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 75 | | 1165 | | 492 | | | 2153 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

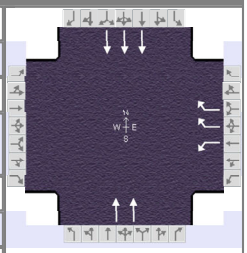
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 79 | | 1226 | | 518 | | | 2266 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.4 | | | 34.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.4 | | | 34.3 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.121 | | 1.195 | | 0.256 | | | 0.782 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 54.7 | | 949 | | 127.5 | | | 467.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 38.0 | | 5.1 | | | 18.7 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.3 | | | 17.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 97.5 | | 0.3 | | | 2.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 129.5 | | 11.6 | | | 19.4 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 123.0 | | F | 11.6 | | B | 19.4 | | B |
| Intersection Delay, s/veh / LOS | 51.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.91 | A | 1.73 | B |

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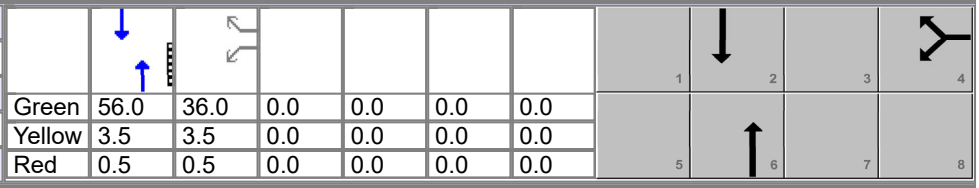
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:45 |
| Intersection | Lankershim/US-101 NB… | File Name | 04AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 75 | | 1180 | | 512 | | | 2160 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.4 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

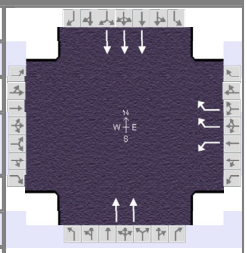
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 79 | | 1242 | | 539 | | | 2274 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 2.9 | | 36.0 | | 7.7 | | | 34.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 2.9 | | 36.0 | | 7.7 | | | 34.5 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.121 | | 1.211 | | 0.266 | | | 0.784 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 54.7 | | 985.8 | | 133.8 | | | 469.4 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 2.2 | | 39.4 | | 5.4 | | | 18.8 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 21.4 | | 32.0 | | 11.4 | | | 17.3 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.0 | | 104.0 | | 0.3 | | | 2.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 21.4 | | 136.0 | | 11.7 | | | 19.5 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 129.1 | | F | 11.7 | | B | 19.5 | | B |
| Intersection Delay, s/veh / LOS | 53.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 0.93 | A | 1.74 | B |

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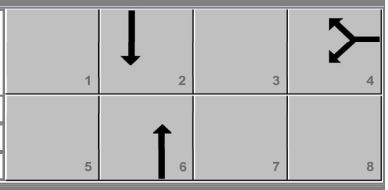
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 753 | | 787 | | | 1195 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 27.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 2.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.19 | | | | |

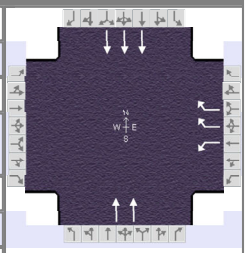
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 818 | | 855 | | | 1299 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 25.8 | | 13.6 | | | 14.7 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.798 | | 0.422 | | | 0.448 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 348.1 | | 226.2 | | | 230 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 13.9 | | 9.0 | | | 9.2 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 28.7 | | 12.7 | | | 12.9 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 4.2 | | 0.6 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 32.9 | | 13.3 | | | 13.4 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 31.5 | | C | 13.3 | | B | 13.4 | | B |
| Intersection Delay, s/veh / LOS | 18.9 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.19 | A | 1.20 | A |

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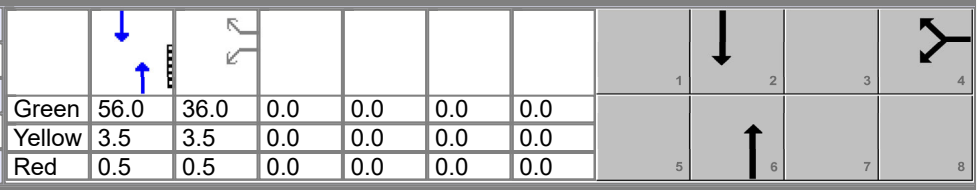
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 113 | | 775 | | 816 | | | 1206 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 28.9 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 1.9 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 0.28 | | | | |

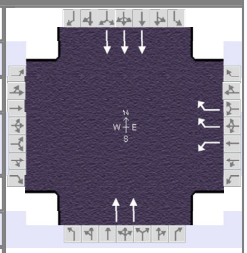
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 123 | | 842 | | 887 | | | 1311 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 4.7 | | 26.9 | | 14.3 | | | 14.9 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 4.7 | | 26.9 | | 14.3 | | | 14.9 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.189 | | 0.821 | | 0.438 | | | 0.452 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 87.3 | | 363.5 | | 235 | | | 232.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.5 | | 14.5 | | 9.4 | | | 9.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.0 | | 29.1 | | 12.8 | | | 13.0 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 5.1 | | 0.7 | | | 0.5 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.0 | | 34.2 | | 13.5 | | | 13.5 | |
| Level of Service (LOS) | | | | C | | C | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 32.6 | | C | 13.5 | | B | 13.5 | | B |
| Intersection Delay, s/veh / LOS | 19.3 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.22 | A | 1.21 | A |

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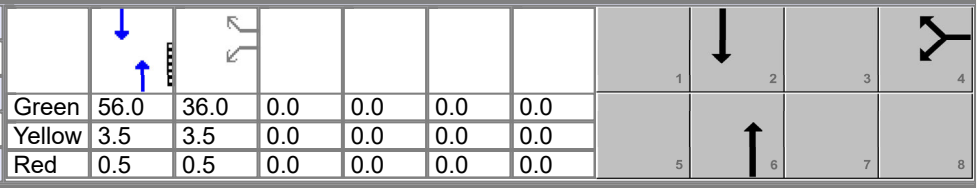
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 123 | | 939 | | 932 | | | 1553 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 37.7 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

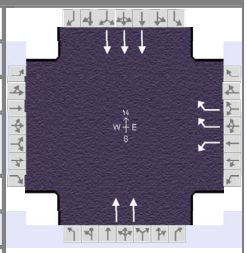
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 134 | | 1021 | | 1013 | | | 1688 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 5.1 | | 35.7 | | 17.1 | | | 21.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 5.1 | | 35.7 | | 17.1 | | | 21.3 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.205 | | 0.995 | | 0.500 | | | 0.582 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 95.7 | | 547.8 | | 272 | | | 310.4 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.8 | | 21.9 | | 10.9 | | | 12.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 31.9 | | 13.4 | | | 14.4 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 26.7 | | 0.9 | | | 0.9 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.2 | | 58.6 | | 14.3 | | | 15.2 | |
| Level of Service (LOS) | | | | C | | E | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 54.4 | | D | 14.3 | | B | 15.2 | | B |
| Intersection Delay, s/veh / LOS | 26.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.32 | A | 1.42 | A |

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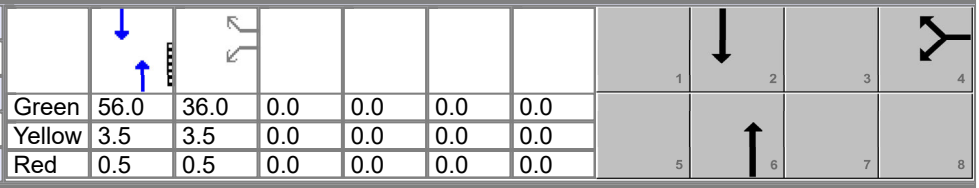
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.92 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/US-101 NB… | File Name | 04PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 123 | | 961 | | 961 | | | 1564 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Green | 56.0 | 36.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Yellow | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Red | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 4 | | 6 | | 2 |
| Case Number | | | | 9.0 | | 8.0 | | 8.0 |
| Phase Duration, s | | | | 40.0 | | 60.0 | | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.0 | | 4.0 | | 4.0 |
| Max Allow Headway ( *MAH* ), s | | | | 3.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 38.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

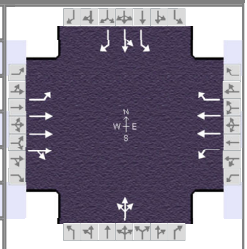
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 7 | | 14 | | 6 | | | 2 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | 134 | | 1045 | | 1045 | | | 1700 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | 1810 | | 1425 | | 1809 | | | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | 5.1 | | 36.0 | | 17.9 | | | 21.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | 5.1 | | 36.0 | | 17.9 | | | 21.5 | |
| Green Ratio ( *g/C* ) | | | | 0.36 | | 0.36 | | 0.56 | | | 0.56 | |
| Capacity ( *c* ), veh/h | | | | 651 | | 1026 | | 2026 | | | 2898 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | 0.205 | | 1.018 | | 0.516 | | | 0.587 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | 95.7 | | 583.6 | | 281.9 | | | 313.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | 3.8 | | 23.3 | | 11.3 | | | 12.5 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | 0.00 | | 0.00 | | 0.00 | | | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | 22.1 | | 32.0 | | 13.6 | | | 14.4 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | 0.1 | | 32.7 | | 0.9 | | | 0.9 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | 0.0 | | 0.0 | | 0.0 | | | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | 22.2 | | 64.7 | | 14.6 | | | 15.3 | |
| Level of Service (LOS) | | | | C | | F | | B | | | B | |
| Approach Delay, s/veh / LOS | 0.0 | | | 59.9 | | E | 14.6 | | B | 15.3 | | B |
| Intersection Delay, s/veh / LOS | 28.5 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.31 | B | 2.31 | B | 1.95 | B | 0.69 | A |
| Bicycle LOS Score / LOS | | | | F | 1.35 | A | 1.42 | A |

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# HCS Signalized Intersection Results Summary

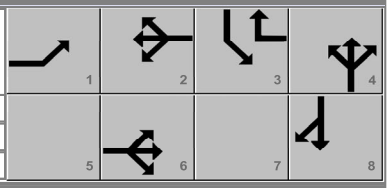
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 201 | 34 | 65 | 54 | 929 | 105 | 1019 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

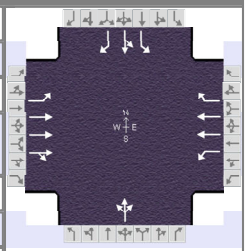
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 205 | | 156 | | 635 | 420 | 1040 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( *g s* ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( *g c* ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 7.4 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.257 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 122.9 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 4.9 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.6 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.8 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.3 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 22.1 | C | | 36.0 | D | | 82.4 | F | |
| Intersection Delay, s/veh / LOS | 54.8 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.79 | A | 0.75 | A | 3.94 | D |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

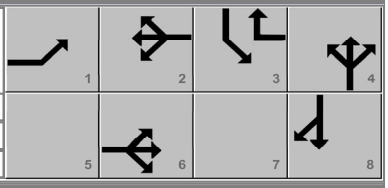


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 48 | 1555 | 10 | 11 | 149 | 221 | 34 | 65 | 54 | 929 | 105 | 1026 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 3.7 | | | | | 9.7 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.0 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.02 | | | | | 0.01 | | 1.00 |

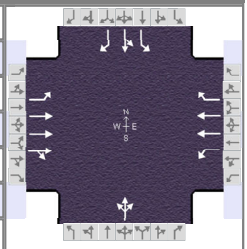
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 49 | 1066 | 531 | 11 | 152 | 226 | | 156 | | 635 | 420 | 1047 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1893 | 324 | 1809 | 1610 | | 1768 | | 1810 | 1833 | |
| Queue Service Time ( *g s* ), s | 1.7 | 23.5 | 23.5 | 3.0 | 3.3 | 8.2 | | 7.7 | | 25.0 | 22.3 | |
| Cycle Queue Clearance Time ( *g c* ), s | 1.7 | 23.5 | 23.5 | 11.6 | 3.3 | 8.2 | | 7.7 | | 25.0 | 22.3 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 538 | 1505 | 750 | 124 | 890 | 799 | | 354 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.091 | 0.708 | 0.708 | 0.091 | 0.171 | 0.282 | | 0.442 | | 1.404 | 0.917 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 32.6 | 401.8 | 418.5 | 12.8 | 66 | 137.1 | | 154.5 | | 1330 | 460.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.3 | 16.1 | 16.7 | 0.5 | 2.6 | 5.5 | | 6.2 | | 53.2 | 18.4 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 20.2 | 25.4 | 25.4 | 36.5 | 29.7 | 14.8 | | 35.1 | | 37.5 | 36.5 | |
| Incremental Delay ( *d 2* ), s/veh | 0.1 | 2.8 | 5.6 | 1.4 | 0.4 | 0.9 | | 0.9 | | 194.7 | 23.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.2 | 28.2 | 30.9 | 37.9 | 30.1 | 15.7 | | 36.0 | | 232.2 | 59.7 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | E | A |
| Approach Delay, s/veh / LOS | 28.8 | C | | 21.9 | C | | 36.0 | D | | 82.1 | F | |
| Intersection Delay, s/veh / LOS | 54.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.39 | A | 0.81 | A | 0.75 | A | 3.96 | D |

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# HCS Signalized Intersection Results Summary

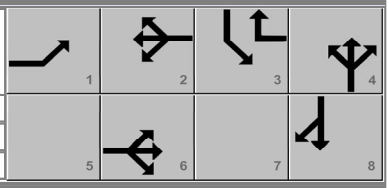
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 10, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | 1695 | 13 | 13 | 194 | 263 | 42 | 96 | 60 | 1090 | 117 | 1160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 4.0 | | | | | 12.2 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.04 | | | | | 0.10 | | 1.00 |

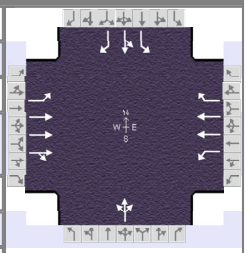
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 57 | 1163 | 579 | 13 | 198 | 268 | | 202 | | 745 | 486 | 1184 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1892 | 281 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( $g_s$ ), s | 2.0 | 26.7 | 26.7 | 4.3 | 4.4 | 10.1 | | 10.2 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.0 | 26.7 | 26.7 | 16.0 | 4.4 | 10.1 | | 10.2 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 515 | 1505 | 749 | 108 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.111 | 0.773 | 0.773 | 0.122 | 0.222 | 0.336 | | 0.566 | | 1.647 | 1.062 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 38.3 | 450.6 | 472.8 | 16.3 | 87.2 | 169 | | 204.9 | | 1875 | 658.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.5 | 18.0 | 18.9 | 0.7 | 3.5 | 6.8 | | 8.2 | | 75.0 | 26.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.3 | 26.3 | 26.3 | 39.8 | 30.1 | 15.2 | | 36.1 | | 37.5 | 37.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 3.9 | 7.6 | 2.3 | 0.6 | 1.1 | | 2.1 | | 301.1 | 59.6 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.4 | 30.2 | 33.9 | 42.1 | 30.6 | 16.4 | | 38.2 | | 338.6 | 97.1 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 31.1 | C | | 23.0 | C | | 38.2 | D | | 124.0 | F | |
| Intersection Delay, s/veh / LOS | 76.4 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.48 | A | 0.88 | A | 0.82 | A | 4.47 | D |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.98 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 7:15 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

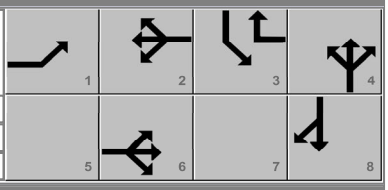


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 56 | 1695 | 13 | 13 | 194 | 283 | 42 | 96 | 60 | 1090 | 117 | 1167 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 4.0 | | | | | 12.2 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.04 | | | | | 0.10 | | 1.00 |

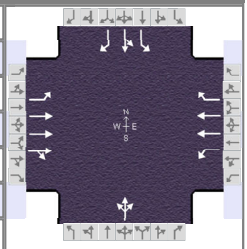
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 57 | 1163 | 579 | 13 | 198 | 289 | | 202 | | 745 | 486 | 1191 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1892 | 281 | 1809 | 1610 | | 1784 | | 1810 | 1832 | |
| Queue Service Time ( $g_s$ ), s | 2.0 | 26.7 | 26.7 | 4.3 | 4.4 | 11.0 | | 10.2 | | 25.0 | 25.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.0 | 26.7 | 26.7 | 16.0 | 4.4 | 11.0 | | 10.2 | | 25.0 | 25.0 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 515 | 1505 | 749 | 108 | 890 | 799 | | 357 | | 452 | 458 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.111 | 0.773 | 0.773 | 0.122 | 0.222 | 0.362 | | 0.566 | | 1.647 | 1.062 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 38.3 | 450.6 | 472.8 | 16.3 | 87.2 | 184.9 | | 204.9 | | 1875 | 658.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.5 | 18.0 | 18.9 | 0.7 | 3.5 | 7.4 | | 8.2 | | 75.0 | 26.3 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 20.3 | 26.3 | 26.3 | 39.8 | 30.1 | 15.5 | | 36.1 | | 37.5 | 37.5 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.1 | 3.9 | 7.6 | 2.3 | 0.6 | 1.3 | | 2.1 | | 301.1 | 59.6 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 20.4 | 30.2 | 33.9 | 42.1 | 30.6 | 16.7 | | 38.2 | | 338.6 | 97.1 | 0.0 |
| Level of Service (LOS) | C | C | C | D | C | B | | D | | F | F | A |
| Approach Delay, s/veh / LOS | 31.1 | C | | 22.9 | C | | 38.2 | D | | 123.6 | F | |
| Intersection Delay, s/veh / LOS | 76.1 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.48 | A | 0.90 | A | 0.82 | A | 4.48 | D |

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# HCS Signalized Intersection Results Summary

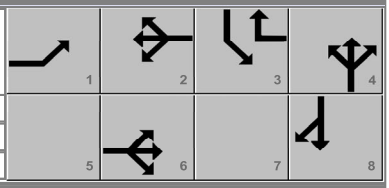
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 541 | 53 | 126 | 63 | 465 | 144 | 691 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( *g s* ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

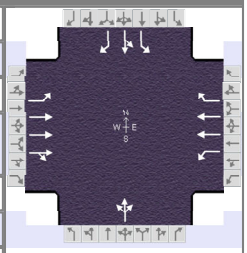
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 546 | | 244 | | 315 | 300 | 698 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( *g s* ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( *g c* ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.684 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 381.2 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 15.2 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.2 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 4.7 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 24.0 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.3 | C | | 42.2 | D | | 17.7 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.47 | A | 0.89 | A | 2.65 | C |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

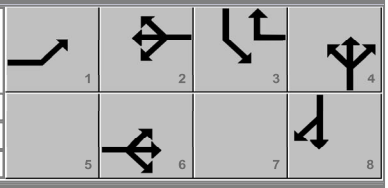


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | 791 | 17 | 42 | 591 | 570 | 53 | 126 | 63 | 465 | 144 | 702 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.2 |
| Queue Clearance Time ( $g_s$ ), s | 5.8 | | | | | 14.6 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.4 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.35 | | | | | 0.51 | | 1.00 |

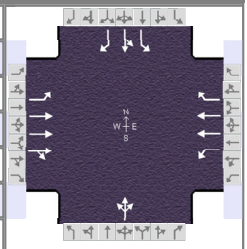
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 103 | 546 | 270 | 42 | 597 | 576 | | 244 | | 315 | 300 | 709 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1879 | 680 | 1809 | 1610 | | 1796 | | 1810 | 1853 | |
| Queue Service Time ( $g_s$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 3.8 | 10.1 | 10.2 | 5.0 | 14.9 | 24.6 | | 12.6 | | 15.8 | 14.5 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 352 | 1505 | 744 | 239 | 890 | 799 | | 359 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.293 | 0.363 | 0.363 | 0.177 | 0.671 | 0.721 | | 0.680 | | 0.696 | 0.648 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 71.7 | 199.2 | 202.8 | 41.2 | 279 | 410.8 | | 251.8 | | 294.1 | 275.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.9 | 8.0 | 8.1 | 1.6 | 11.2 | 16.4 | | 10.1 | | 11.8 | 11.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 22.3 | 21.3 | 21.3 | 30.3 | 34.0 | 19.8 | | 37.0 | | 34.0 | 33.6 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 0.7 | 1.4 | 1.6 | 4.0 | 5.6 | | 5.1 | | 4.6 | 3.2 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 22.7 | 22.0 | 22.7 | 31.9 | 38.1 | 25.3 | | 42.2 | | 38.6 | 36.7 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 22.3 | C | | 31.8 | C | | 42.2 | D | | 17.5 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 0.99 | A | 1.49 | A | 0.89 | A | 2.67 | C |

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# HCS Signalized Intersection Results Summary

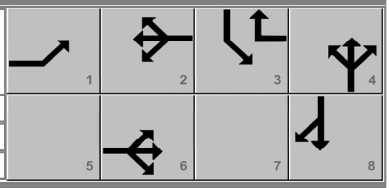
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 117 | 911 | 24 | 47 | 692 | 649 | 61 | 146 | 69 | 585 | 159 | 925 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( *g s* ), s | 6.4 | | | | | 16.7 | | 27.0 |
| Green Extension Time ( *g e* ), s | 0.1 | 0.0 | | 0.0 | | 0.3 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.63 | | | | | 1.00 | | 1.00 |

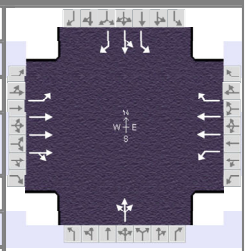
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 118 | 632 | 312 | 47 | 699 | 656 | | 279 | | 396 | 356 | 934 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1874 | 603 | 1809 | 1610 | | 1799 | | 1810 | 1850 | |
| Queue Service Time ( *g s* ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Cycle Queue Clearance Time ( *g c* ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 321 | 1505 | 742 | 220 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | 0.420 | 0.421 | 0.215 | 0.785 | 0.821 | | 0.775 | | 0.875 | 0.769 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 83.5 | 229 | 232.9 | 47.5 | 334.3 | 506.2 | | 298.6 | | 415.1 | 341 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.3 | 9.2 | 9.3 | 1.9 | 13.4 | 20.2 | | 11.9 | | 16.6 | 13.6 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( *d 1* ), s/veh | 23.2 | 21.9 | 21.9 | 30.9 | 35.2 | 21.4 | | 37.9 | | 36.0 | 34.8 | |
| Incremental Delay ( *d 2* ), s/veh | 0.7 | 0.9 | 1.8 | 2.2 | 6.9 | 9.3 | | 10.1 | | 17.2 | 7.7 | |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.9 | 22.7 | 23.6 | 33.1 | 42.1 | 30.7 | | 48.0 | | 53.2 | 42.5 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 23.1 | C | | 36.5 | D | | 48.0 | D | | 21.5 | C | |
| Intersection Delay, s/veh / LOS | 28.3 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.07 | A | 1.64 | B | 0.95 | A | 3.27 | C |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Lankershim Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Lankershim/Ventura-Ca… | File Name | 05PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

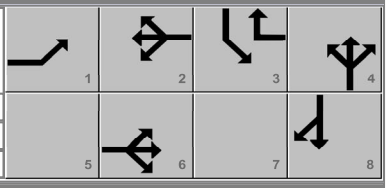


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 117 | 911 | 24 | 47 | 692 | 678 | 61 | 146 | 69 | 585 | 159 | 936 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 100.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 11.0 | 24.6 | 25.0 | 20.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 |
| Red | 1.0 | 1.5 | 1.1 | 1.1 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 15.0 | 45.0 | | 30.0 | | 25.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.0 | 5.4 | | 5.4 | | 5.0 | | 5.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 4.3 |
| Queue Clearance Time ( $g_s$ ), s | 6.4 | | | | | 16.7 | | 27.0 |
| Green Extension Time ( $g_e$ ), s | 0.1 | 0.0 | | 0.0 | | 0.3 | | 0.0 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.63 | | | | | 1.00 | | 1.00 |

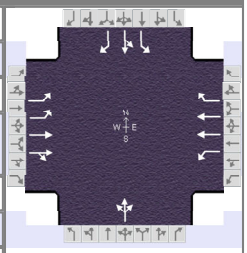
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 118 | 632 | 312 | 47 | 699 | 685 | | 279 | | 396 | 356 | 945 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | 1900 | 1874 | 603 | 1809 | 1610 | | 1799 | | 1810 | 1850 | |
| Queue Service Time ( $g_s$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.4 | 12.1 | 12.1 | 6.4 | 18.1 | 24.6 | | 14.7 | | 21.0 | 17.8 | |
| Green Ratio ( *g/C* ) | 0.38 | 0.40 | 0.40 | 0.25 | 0.25 | 0.50 | | 0.20 | | 0.25 | 0.25 | |
| Capacity ( *c* ), veh/h | 321 | 1505 | 742 | 220 | 890 | 799 | | 360 | | 452 | 463 | |
| Volume-to-Capacity Ratio ( *X* ) | 0.369 | 0.420 | 0.421 | 0.215 | 0.785 | 0.858 | | 0.775 | | 0.875 | 0.769 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 83.5 | 229 | 232.9 | 47.5 | 334.3 | 549.7 | | 298.6 | | 415.1 | 341 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.3 | 9.2 | 9.3 | 1.9 | 13.4 | 22.0 | | 11.9 | | 16.6 | 13.6 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | 23.2 | 21.9 | 21.9 | 30.9 | 35.2 | 22.1 | | 37.9 | | 36.0 | 34.8 | |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | 0.9 | 1.8 | 2.2 | 6.9 | 11.5 | | 10.1 | | 17.2 | 7.7 | |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | 23.9 | 22.7 | 23.6 | 33.1 | 42.1 | 33.6 | | 48.0 | | 53.2 | 42.5 | 0.0 |
| Level of Service (LOS) | C | C | C | C | D | C | | D | | D | D | A |
| Approach Delay, s/veh / LOS | 23.1 | C | | 37.8 | D | | 48.0 | D | | 21.3 | C | |
| Intersection Delay, s/veh / LOS | 28.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.72 | B | 2.14 | B | 2.59 | C | 2.46 | B |
| Bicycle LOS Score / LOS | 1.07 | A | 1.67 | B | 0.95 | A | 3.29 | C |

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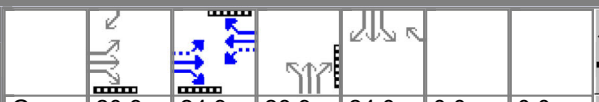
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

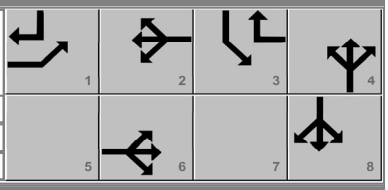


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 212 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

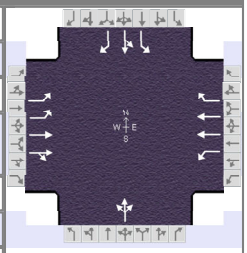
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 219 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 11.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.368 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 205.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.2 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 27.6 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.2 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 46.2 | D | |
| Intersection Delay, s/veh / LOS | 52.0 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.59 | B |

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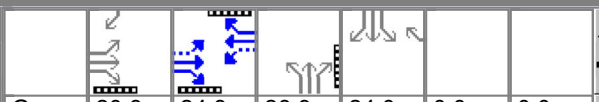
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

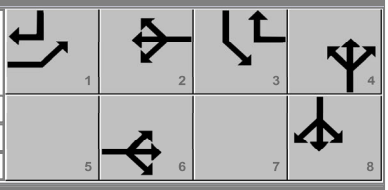


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 467 | 1481 | 14 | 14 | 392 | 22 | 37 | 10 | 16 | 433 | 6 | 232 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( *Y+R c* ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 13.7 | | | | | 5.5 | | 21.0 |
| Green Extension Time ( *g e* ), s | 1.2 | 0.0 | | 0.0 | | 0.2 | | 1.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.33 | | | | | 0.00 | | 1.00 |

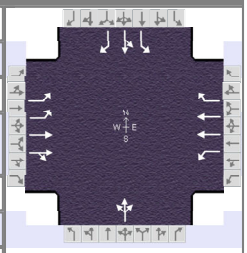
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 481 | 771 | 770 | 14 | 404 | 23 | | 65 | | 299 | 153 | 239 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1894 | 342 | 1809 | 1610 | | 1767 | | 1810 | 1813 | 1610 |
| Queue Service Time ( *g s* ), s | 11.7 | 48.3 | 48.4 | 0.9 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.2 |
| Cycle Queue Clearance Time ( *g c* ), s | 11.7 | 48.3 | 48.4 | 24.3 | 12.0 | 1.0 | | 3.5 | | 19.0 | 8.9 | 13.2 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 918 | 781 | 778 | 62 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.524 | 0.988 | 0.989 | 0.231 | 0.552 | 0.035 | | 0.153 | | 0.826 | 0.423 | 0.402 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 212.5 | 913.8 | 914.4 | 26.2 | 238.6 | 18.2 | | 69.6 | | 380.6 | 184.5 | 223.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 36.6 | 36.6 | 1.0 | 9.5 | 0.7 | | 2.8 | | 15.2 | 7.4 | 8.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 27.1 | 35.1 | 35.1 | 59.9 | 43.0 | 21.7 | | 35.9 | | 46.0 | 42.0 | 28.0 |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 29.5 | 29.8 | 8.4 | 3.0 | 0.1 | | 0.2 | | 15.1 | 1.1 | 0.6 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 27.6 | 64.6 | 64.9 | 68.4 | 45.9 | 21.8 | | 36.1 | | 61.1 | 43.1 | 28.7 |
| Level of Service (LOS) | C | E | E | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 55.9 | E | | 45.4 | D | | 36.1 | D | | 45.9 | D | |
| Intersection Delay, s/veh / LOS | 51.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.16 | B | 0.85 | A | 0.59 | A | 1.63 | B |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

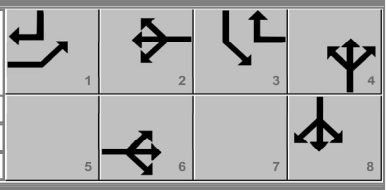


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 526 | 1684 | 17 | 16 | 473 | 24 | 45 | 12 | 19 | 482 | 6 | 250 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.4 | | | | | 6.2 | | 23.6 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.73 | | | | | 0.00 | | 1.00 |

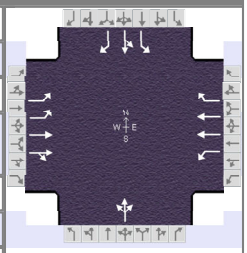
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 542 | 877 | 876 | 16 | 488 | 25 | | 78 | | 333 | 170 | 258 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1893 | 278 | 1809 | 1610 | | 1768 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.4 | 49.3 | 49.3 | 0.0 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 14.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.4 | 49.3 | 49.3 | 24.3 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 14.4 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 859 | 781 | 778 | 60 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.631 | 1.124 | 1.127 | 0.275 | 0.666 | 0.038 | | 0.184 | | 0.920 | 0.469 | 0.434 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 240.6 | 1293.3 | 1297.9 | 30.7 | 286.7 | 19.9 | | 84.6 | | 459.2 | 202.8 | 239.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.6 | 51.7 | 51.9 | 1.2 | 11.5 | 0.8 | | 3.4 | | 18.4 | 8.1 | 9.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.2 | 35.4 | 35.4 | 60.0 | 44.1 | 21.8 | | 36.2 | | 47.1 | 42.4 | 28.4 |
| Incremental Delay ( $d_2$ ), s/veh | 1.5 | 72.0 | 73.0 | 11.0 | 4.7 | 0.1 | | 0.2 | | 28.4 | 1.3 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 29.7 | 107.3 | 108.4 | 71.0 | 48.8 | 21.9 | | 36.4 | | 75.5 | 43.7 | 29.1 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 89.4 | F | | 48.3 | D | | 36.4 | D | | 52.7 | D | |
| Intersection Delay, s/veh / LOS | 74.7 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.38 | B | 0.92 | A | 0.62 | A | 1.74 | B |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

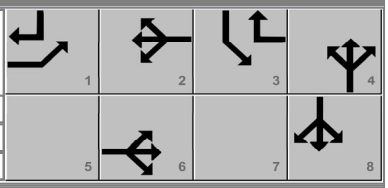


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 526 | 1684 | 17 | 16 | 473 | 24 | 45 | 12 | 19 | 482 | 6 | 270 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.4 | | | | | 6.2 | | 23.6 |
| Green Extension Time ( $g_e$ ), s | 1.1 | 0.0 | | 0.0 | | 0.2 | | 0.2 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.73 | | | | | 0.00 | | 1.00 |

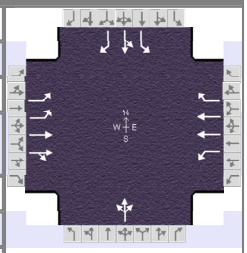
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 542 | 877 | 876 | 16 | 488 | 25 | | 78 | | 333 | 170 | 278 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1893 | 278 | 1809 | 1610 | | 1768 | | 1810 | 1813 | 1610 |
| Queue Service Time ( $g_s$ ), s | 13.4 | 49.3 | 49.3 | 0.0 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 15.8 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.4 | 49.3 | 49.3 | 24.3 | 14.9 | 1.1 | | 4.2 | | 21.6 | 9.9 | 15.8 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 859 | 781 | 778 | 60 | 733 | 648 | | 426 | | 362 | 363 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.631 | 1.124 | 1.127 | 0.275 | 0.666 | 0.038 | | 0.184 | | 0.920 | 0.469 | 0.468 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 240.6 | 1293.3 | 1297.9 | 30.7 | 286.7 | 19.9 | | 84.6 | | 459.2 | 202.8 | 258.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.6 | 51.7 | 51.9 | 1.2 | 11.5 | 0.8 | | 3.4 | | 18.4 | 8.1 | 10.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.2 | 35.4 | 35.4 | 60.0 | 44.1 | 21.8 | | 36.2 | | 47.1 | 42.4 | 28.9 |
| Incremental Delay ( $d_2$ ), s/veh | 1.5 | 72.0 | 73.0 | 11.0 | 4.7 | 0.1 | | 0.2 | | 28.4 | 1.3 | 0.8 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 29.7 | 107.3 | 108.4 | 71.0 | 48.8 | 21.9 | | 36.4 | | 75.5 | 43.7 | 29.7 |
| Level of Service (LOS) | C | F | F | E | D | C | | D | | E | D | C |
| Approach Delay, s/veh / LOS | 89.4 | F | | 48.3 | D | | 36.4 | D | | 52.2 | D | |
| Intersection Delay, s/veh / LOS | 74.5 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.38 | B | 0.92 | A | 0.62 | A | 1.78 | B |

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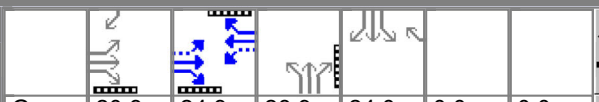
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

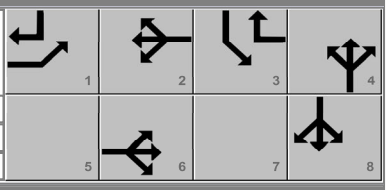


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 228 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 15.2 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.3 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.45 |

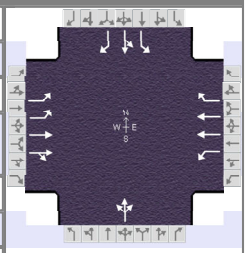
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 235 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 12.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.395 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 219.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 8.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.0 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.6 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 28.6 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.5 | D | |
| Intersection Delay, s/veh / LOS | 76.6 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.45 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

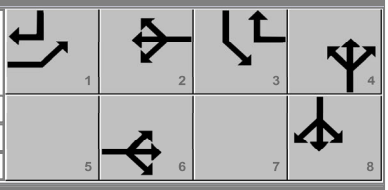


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 453 | 806 | 14 | 21 | 894 | 78 | 31 | 13 | 11 | 316 | 19 | 257 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 13.2 | | | | | 5.0 | | 16.9 |
| Green Extension Time ( $g_e$ ), s | 1.2 | 0.0 | | 0.0 | | 0.1 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.27 | | | | | 0.00 | | 0.68 |

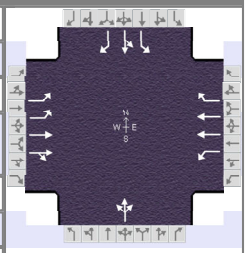
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 467 | 424 | 421 | 22 | 922 | 80 | | 57 | | 218 | 127 | 265 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1888 | 662 | 1809 | 1610 | | 1785 | | 1810 | 1823 | 1610 |
| Queue Service Time ( $g_s$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 11.2 | 20.3 | 20.3 | 3.2 | 24.3 | 3.8 | | 3.0 | | 13.2 | 7.2 | 14.9 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 776 | 194 | 733 | 648 | | 430 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.654 | 0.543 | 0.543 | 0.112 | 1.258 | 0.124 | | 0.132 | | 0.603 | 0.348 | 0.446 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 211.8 | 367.6 | 365.9 | 26.5 | 887.9 | 67 | | 60.4 | | 258.3 | 149.9 | 246.1 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 8.5 | 14.7 | 14.6 | 1.1 | 35.5 | 2.7 | | 2.4 | | 10.3 | 6.0 | 9.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 28.8 | 26.8 | 26.8 | 39.5 | 47.9 | 22.5 | | 35.7 | | 43.7 | 41.3 | 28.6 |
| Incremental Delay ( $d_2$ ), s/veh | 2.1 | 2.7 | 2.7 | 1.2 | 127.1 | 0.4 | | 0.1 | | 3.3 | 0.8 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 30.9 | 29.5 | 29.5 | 40.6 | 174.9 | 22.9 | | 35.9 | | 47.0 | 42.1 | 29.3 |
| Level of Service (LOS) | C | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 30.0 | C | | 160.2 | F | | 35.9 | D | | 38.3 | D | |
| Intersection Delay, s/veh / LOS | 76.2 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.57 | B | 1.33 | A | 0.58 | A | 1.49 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

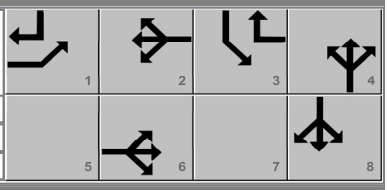


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 544 | 951 | 20 | 25 | 1074 | 84 | 36 | 14 | 14 | 303 | 21 | 253 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 16.1 | | | | | 5.5 | | 16.6 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | 0.2 | | 2.1 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.95 | | | | | 0.00 | | 0.63 |

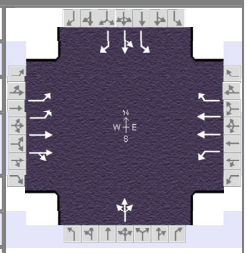
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 561 | 502 | 499 | 26 | 1107 | 87 | | 66 | | 209 | 125 | 261 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1886 | 572 | 1809 | 1610 | | 1780 | | 1810 | 1825 | 1610 |
| Queue Service Time ( $g_s$ ), s | 14.1 | 25.4 | 25.4 | 4.5 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 14.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 14.1 | 25.4 | 25.4 | 5.0 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 14.6 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 775 | 174 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.785 | 0.644 | 0.644 | 0.148 | 1.511 | 0.134 | | 0.154 | | 0.578 | 0.342 | 0.439 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 263.1 | 447.7 | 445.1 | 32.6 | 1338.2 | 72.5 | | 70.7 | | 247.2 | 146.7 | 242.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.5 | 17.9 | 17.8 | 1.3 | 53.5 | 2.9 | | 2.8 | | 9.9 | 5.9 | 9.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 30.0 | 28.3 | 28.3 | 40.3 | 47.9 | 22.6 | | 35.9 | | 43.4 | 41.2 | 28.5 |
| Incremental Delay ( $d_2$ ), s/veh | 5.8 | 4.1 | 4.1 | 1.8 | 237.2 | 0.4 | | 0.2 | | 2.8 | 0.8 | 0.7 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 35.8 | 32.4 | 32.4 | 42.1 | 285.0 | 23.1 | | 36.1 | | 46.2 | 42.0 | 29.2 |
| Level of Service (LOS) | D | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 33.6 | C | | 261.3 | F | | 36.1 | D | | 37.9 | D | |
| Intersection Delay, s/veh / LOS | 115.1 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.78 | B | 1.49 | A | 0.60 | A | 1.47 | A |

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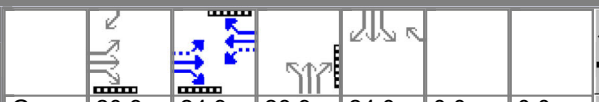
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.97 |
| Urban Street | Cahuenga Boulevard | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | US-101 SB Ramps-Reg… | File Name | 06PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

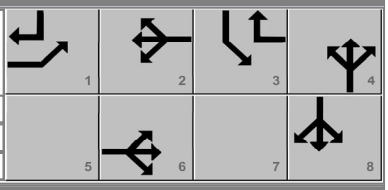


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 544 | 951 | 20 | 25 | 1074 | 84 | 36 | 14 | 14 | 303 | 21 | 282 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 20.3 | 24.3 | 28.9 | 24.0 | 0.0 | 0.0 |
| Yellow | 3.7 | 4.1 | 3.6 | 3.7 | 0.0 | 0.0 |
| Red | 1.0 | 1.6 | 2.5 | 2.3 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 1 | 6 | | 2 | | 4 | | 8 |
| Case Number | 1.0 | 4.0 | | 5.3 | | 12.0 | | 9.0 |
| Phase Duration, s | 25.0 | 55.0 | | 30.0 | | 35.0 | | 30.0 |
| Change Period, ( $Y+R_c$ ), s | 4.7 | 5.7 | | 5.7 | | 6.1 | | 6.0 |
| Max Allow Headway ( *MAH* ), s | 4.1 | 0.0 | | 0.0 | | 4.3 | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 16.1 | | | | | 5.5 | | 18.7 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | 0.2 | | 1.8 |
| Phase Call Probability | 1.00 | | | | | 1.00 | | 1.00 |
| Max Out Probability | 0.95 | | | | | 0.00 | | 0.99 |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 1 | 6 | 16 | 5 | 2 | 12 | 7 | 4 | 14 | 3 | 8 | 18 |
| Adjusted Flow Rate ( *v* ), veh/h | 561 | 502 | 499 | 26 | 1107 | 87 | | 66 | | 209 | 125 | 291 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1900 | 1886 | 572 | 1809 | 1610 | | 1780 | | 1810 | 1825 | 1610 |
| Queue Service Time ( $g_s$ ), s | 14.1 | 25.4 | 25.4 | 4.5 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 16.7 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 14.1 | 25.4 | 25.4 | 5.0 | 24.3 | 4.1 | | 3.5 | | 12.6 | 7.0 | 16.7 |
| Green Ratio ( *g/C* ) | 0.39 | 0.41 | 0.41 | 0.20 | 0.20 | 0.40 | | 0.24 | | 0.20 | 0.20 | 0.37 |
| Capacity ( *c* ), veh/h | 714 | 781 | 775 | 174 | 733 | 648 | | 429 | | 362 | 365 | 594 |
| Volume-to-Capacity Ratio ( *X* ) | 0.785 | 0.644 | 0.644 | 0.148 | 1.511 | 0.134 | | 0.154 | | 0.578 | 0.342 | 0.489 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 263.1 | 447.7 | 445.1 | 32.6 | 1338.2 | 72.5 | | 70.7 | | 247.2 | 146.7 | 269.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.5 | 17.9 | 17.8 | 1.3 | 53.5 | 2.9 | | 2.8 | | 9.9 | 5.9 | 10.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 30.0 | 28.3 | 28.3 | 40.3 | 47.9 | 22.6 | | 35.9 | | 43.4 | 41.2 | 29.1 |
| Incremental Delay ( $d_2$ ), s/veh | 5.8 | 4.1 | 4.1 | 1.8 | 237.2 | 0.4 | | 0.2 | | 2.8 | 0.8 | 0.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | | 0.0 | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 35.8 | 32.4 | 32.4 | 42.1 | 285.0 | 23.1 | | 36.1 | | 46.2 | 42.0 | 30.0 |
| Level of Service (LOS) | D | C | C | D | F | C | | D | | D | D | C |
| Approach Delay, s/veh / LOS | 33.6 | C | | 261.3 | F | | 36.1 | D | | 37.8 | D | |
| Intersection Delay, s/veh / LOS | 114.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 1.69 | B | 2.30 | B | 2.46 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.78 | B | 1.49 | A | 0.60 | A | 1.52 | B |

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# HCS Two-Way Stop-Control Report

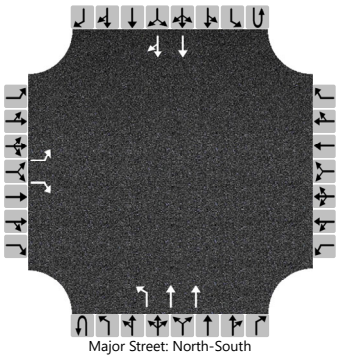
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 55 | | 20 | | | | | 0 | 33 | 188 | | | | 536 | 30 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 62 | | 22 | | | | | | 37 | | | | | | |
| Capacity, c (veh/h) | | 473 | | 675 | | | | | | 937 | | | | | | |
| v/c Ratio | | 0.13 | | 0.03 | | | | | | 0.04 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.4 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 13.7 | | 10.5 | | | | | | 9.0 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.9 | | | | | | | | 1.3 | | | | | | |
| Approach LOS | | B | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

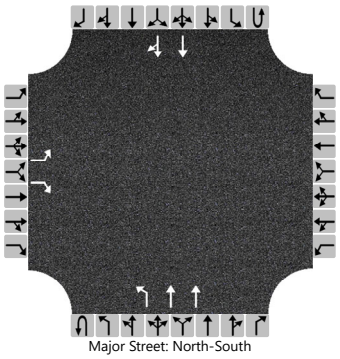
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 99 | | 50 | | | | | 0 | 58 | 188 | | | | 536 | 104 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 111 | | 56 | | | | | | 65 | | | | | | |
| Capacity, c (veh/h) | | 445 | | 634 | | | | | | 871 | | | | | | |
| v/c Ratio | | 0.25 | | 0.09 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.0 | | 0.3 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 15.8 | | 11.2 | | | | | | 9.5 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.2 | | | | | | | | 2.2 | | | | | | |
| Approach LOS | | B | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

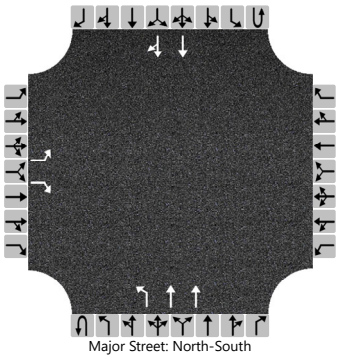
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2027 |
| Time Analyzed | Future - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 59 | | 21 | | | | | 0 | 35 | 451 | | | | 1018 | 32 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 66 | | 24 | | | | | | 39 | | | | | | |
| Capacity, c (veh/h) | | 247 | | 448 | | | | | | 582 | | | | | | |
| v/c Ratio | | 0.27 | | 0.05 | | | | | | 0.07 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.1 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 24.9 | | 13.5 | | | | | | 11.6 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 21.9 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

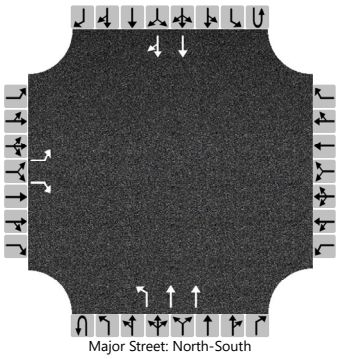
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2027 |
| Time Analyzed | Future + Project - AM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.89 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 103 | | 51 | | | | | 0 | 60 | 451 | | | | 1018 | 106 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 116 | | 57 | | | | | | 67 | | | | | | |
| Capacity, c (veh/h) | | 233 | | 421 | | | | | | 541 | | | | | | |
| v/c Ratio | | 0.50 | | 0.14 | | | | | | 0.12 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 2.5 | | 0.5 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 34.8 | | 14.9 | | | | | | 12.6 | | | | | | |
| Level of Service (LOS) | | D | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 28.2 | | | | | | | | 1.5 | | | | | | |
| Approach LOS | | D | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

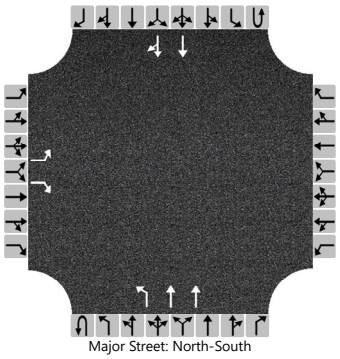
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2020 |
| Time Analyzed | Existing - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 38 | | 24 | | | | | 0 | 33 | 345 | | | | 235 | 40 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 47 | | 30 | | | | | | 41 | | | | | | |
| Capacity, c (veh/h) | | 611 | | 841 | | | | | | 1209 | | | | | | |
| v/c Ratio | | 0.08 | | 0.04 | | | | | | 0.03 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.2 | | 0.1 | | | | | | 0.1 | | | | | | |
| Control Delay (s/veh) | | 11.4 | | 9.4 | | | | | | 8.1 | | | | | | |
| Level of Service (LOS) | | B | | A | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 10.6 | | | | | | | | 0.7 | | | | | | |
| Approach LOS | | B | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

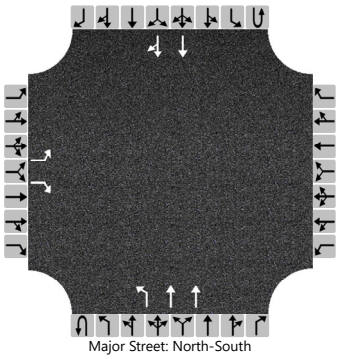
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2020 |
| Time Analyzed | Existing + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 101 | | 66 | | | | | 0 | 69 | 345 | | | | 235 | 148 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 125 | | 81 | | | | | | 85 | | | | | | |
| Capacity, c (veh/h) | | 529 | | 762 | | | | | | 1078 | | | | | | |
| v/c Ratio | | 0.24 | | 0.11 | | | | | | 0.08 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.9 | | 0.4 | | | | | | 0.3 | | | | | | |
| Control Delay (s/veh) | | 13.9 | | 10.3 | | | | | | 8.6 | | | | | | |
| Level of Service (LOS) | | B | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 12.5 | | | | | | | | 1.4 | | | | | | |
| Approach LOS | | B | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

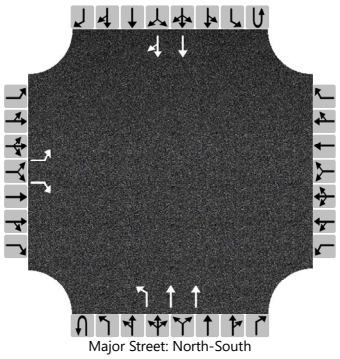
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2027 |
| Time Analyzed | Future - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 41 | | 26 | | | | | 0 | 35 | 793 | | | | 543 | 43 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 51 | | 32 | | | | | | 43 | | | | | | |
| Capacity, c (veh/h) | | 378 | | 632 | | | | | | 868 | | | | | | |
| v/c Ratio | | 0.13 | | 0.05 | | | | | | 0.05 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 0.5 | | 0.2 | | | | | | 0.2 | | | | | | |
| Control Delay (s/veh) | | 16.0 | | 11.0 | | | | | | 9.4 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | A | | | | | | |
| Approach Delay (s/veh) | | 14.0 | | | | | | | | 0.4 | | | | | | |
| Approach LOS | | B | | | | | | | | A | | | | | | |

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# HCS Two-Way Stop-Control Report

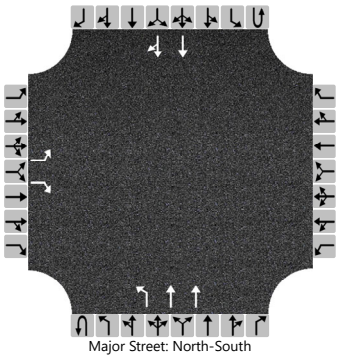
## General Information

| | |
|---|---|
| Analyst | JAS |
| Agency/Co. | Linscott, Law & Greenspan |
| Date Performed | 3/14/2023 |
| Analysis Year | 2027 |
| Time Analyzed | Future + Project - PM |
| Intersection Orientation | North-South |
| Project Description | Hilton Universal City |

## Site Information

| | |
|---|---|
| Intersection | Universal Hollywood Drive / Hilton Driveway |
| Jurisdiction | City of Los Angeles |
| East/West Street | Hilton Driveway |
| North/South Street | Universal Hollywood Drive |
| Peak Hour Factor | 0.81 |
| Analysis Time Period (hrs) | 0.25 |

## Lanes


Major Street: North-South

## Vehicle Volumes and Adjustments

| Approach | Eastbound | | | | Westbound | | | | Northbound | | | | Southbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement | U | L | T | R | U | L | T | R | U | L | T | R | U | L | T | R |
| Priority | | 10 | 11 | 12 | | 7 | 8 | 9 | 1U | 1 | 2 | 3 | 4U | 4 | 5 | 6 |
| Number of Lanes | | 1 | 0 | 1 | | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 2 | 0 |
| Configuration | | L | | R | | | | | | L | T | | | | T | TR |
| Volume (veh/h) | | 104 | | 68 | | | | | 0 | 71 | 793 | | | | 543 | 151 |
| Percent Heavy Vehicles (%) | | 3 | | 3 | | | | | 3 | 3 | | | | | | |
| Proportion Time Blocked | | | | | | | | | | | | | | | | |
| Percent Grade (%) | | 0 | | | | | | | | | | | | | | |
| Right Turn Channelized | | No | | | | | | | | | | | | | | |
| Median Type \| Storage | | Left Only | | | | | | | | 3 | | | | | | |

## Critical and Follow-up Headways

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Critical Headway (sec) | | 7.5 | | 6.9 | | | | | | 4.1 | | | | | | |
| Critical Headway (sec) | | 6.86 | | 6.96 | | | | | | 4.16 | | | | | | |
| Base Follow-Up Headway (sec) | | 3.5 | | 3.3 | | | | | | 2.2 | | | | | | |
| Follow-Up Headway (sec) | | 3.53 | | 3.33 | | | | | | 2.23 | | | | | | |

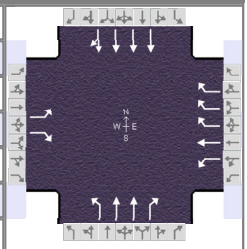
## Delay, Queue Length, and Level of Service

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Rate, v (veh/h) | | 128 | | 84 | | | | | | 88 | | | | | | |
| Capacity, c (veh/h) | | 329 | | 572 | | | | | | 773 | | | | | | |
| v/c Ratio | | 0.39 | | 0.15 | | | | | | 0.11 | | | | | | |
| 95% Queue Length, $Q_{95}$ (veh) | | 1.8 | | 0.5 | | | | | | 0.4 | | | | | | |
| Control Delay (s/veh) | | 22.7 | | 12.4 | | | | | | 10.3 | | | | | | |
| Level of Service (LOS) | | C | | B | | | | | | B | | | | | | |
| Approach Delay (s/veh) | | 18.6 | | | | | | | | 0.8 | | | | | | |
| Approach LOS | | C | | | | | | | | A | | | | | | |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

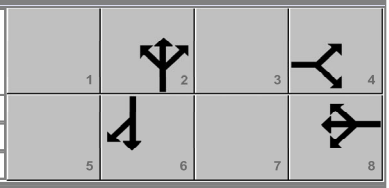


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 77 | 140 | 273 | 771 | 28 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.5 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.07 | | 0.70 | | | | |

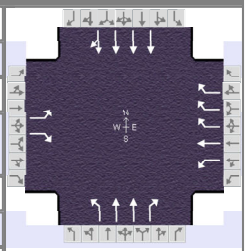
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 83 | 151 | 294 | 829 | 30 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 1.6 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 4.1 | 6.0 | 12.0 | 15.8 | 4.0 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.319 | 0.307 | 0.570 | 0.715 | 0.062 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 72.3 | 112 | 229.7 | 228.3 | 19.9 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 2.9 | 4.5 | 9.2 | 9.1 | 0.8 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 33.4 | 26.1 | 28.3 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 0.7 | 0.4 | 1.5 | 2.1 | 0.2 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 34.1 | 26.4 | 29.8 | 31.8 | 18.9 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | C | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.2 | | C | 30.7 | | C | 13.7 | | B | 17.5 | | B |
| Intersection Delay, s/veh / LOS | 26.1 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.59 | C | 0.81 | A | 0.61 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 95 | | 107 | 140 | 294 | 771 | 32 | 243 | 92 | | 234 | 37 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 7.8 | | 17.8 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 3.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.21 | | 0.71 | | | | |

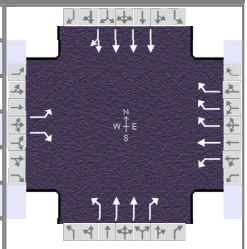
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 102 | | 115 | 151 | 316 | 829 | 34 | 261 | 99 | | 220 | 71 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1105 | 1809 | | | 1900 | 1727 |
| Queue Service Time ( $g_s$ ), s | 4.5 | | 5.8 | 6.0 | 13.1 | 15.8 | 1.8 | 4.3 | | | 2.2 | 2.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.5 | | 5.8 | 6.0 | 13.1 | 15.8 | 4.2 | 4.3 | | | 2.2 | 2.4 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 483 | 1415 | | | 2229 | 675 |
| Volume-to-Capacity Ratio ( *X* ) | 0.350 | | 0.444 | 0.307 | 0.614 | 0.715 | 0.071 | 0.185 | | | 0.099 | 0.106 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 89.6 | | 103.4 | 112 | 249 | 228.3 | 22.8 | 82.2 | | | 44 | 44.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.6 | | 4.1 | 4.5 | 10.0 | 9.1 | 0.9 | 3.3 | | | 1.8 | 1.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.6 | | 34.1 | 26.1 | 28.7 | 29.7 | 18.7 | 18.0 | | | 17.4 | 17.4 |
| Incremental Delay ( $d_2$ ), s/veh | 0.7 | | 1.2 | 0.4 | 2.2 | 2.1 | 0.3 | 0.3 | | | 0.1 | 0.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.3 | | 35.3 | 26.4 | 30.8 | 31.8 | 19.0 | 18.3 | 0.0 | | 17.4 | 17.7 |
| Level of Service (LOS) | C | | D | C | C | C | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.8 | C | | 30.9 | C | | 13.8 | B | | 17.5 | B | |
| Intersection Delay, s/veh / LOS | 26.5 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 2.63 | C | 0.81 | A | 0.61 | A |

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# HCS Signalized Intersection Results Summary

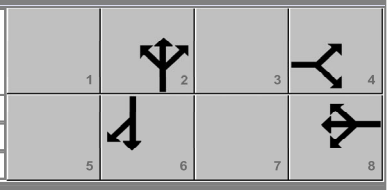
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | | 83 | 150 | 296 | 1000 | 30 | 310 | 109 | | 332 | 40 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.2 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 6.9 | | 24.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.10 | | 1.00 | | | | |

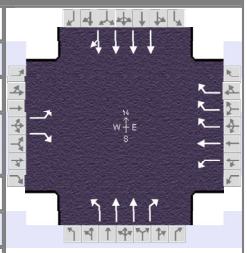
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 110 | | 89 | 161 | 318 | 1075 | 32 | 333 | 117 | | 302 | 98 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1000 | 1809 | | | 1900 | 1761 |
| Queue Service Time ( $g_s$ ), s | 4.9 | | 4.4 | 6.4 | 13.2 | 22.0 | 1.9 | 5.6 | | | 3.1 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.9 | | 4.4 | 6.4 | 13.2 | 22.0 | 5.2 | 5.6 | | | 3.1 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 435 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.376 | | 0.344 | 0.329 | 0.618 | 0.928 | 0.074 | 0.236 | | | 0.136 | 0.142 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 96.7 | | 78.4 | 121.1 | 250.9 | 331.8 | 22 | 107.2 | | | 61.4 | 62.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | | 3.1 | 4.8 | 10.0 | 13.3 | 0.9 | 4.3 | | | 2.5 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 33.5 | 26.2 | 28.7 | 31.9 | 19.3 | 18.4 | | | 17.6 | 17.7 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 0.8 | 0.4 | 2.2 | 12.7 | 0.3 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.5 | | 34.3 | 26.6 | 31.0 | 44.7 | 19.7 | 18.8 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | C | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 34.4 | C | | 40.0 | D | | 14.3 | B | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 31.5 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.05 | C | 0.89 | A | 0.65 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.93 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 102 | | 113 | 150 | 317 | 1000 | 34 | 310 | 109 | | 332 | 40 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 | 5 | 6 | 7 | 8 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 | | | | |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 | | | | |

| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 8.2 | | 24.0 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.4 | | 0.3 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 0.27 | | 1.00 | | | | |

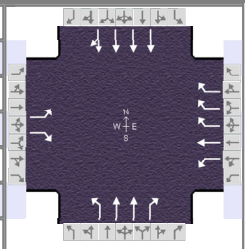
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 110 | | 122 | 161 | 341 | 1075 | 37 | 333 | 117 | | 302 | 98 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 1000 | 1809 | | | 1900 | 1761 |
| Queue Service Time ( $g_s$ ), s | 4.9 | | 6.2 | 6.4 | 14.3 | 22.0 | 2.2 | 5.6 | | | 3.1 | 3.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.9 | | 6.2 | 6.4 | 14.3 | 22.0 | 5.4 | 5.6 | | | 3.1 | 3.2 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 435 | 1415 | | | 2229 | 689 |
| Volume-to-Capacity Ratio ( *X* ) | 0.376 | | 0.468 | 0.329 | 0.662 | 0.928 | 0.084 | 0.236 | | | 0.136 | 0.142 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 96.7 | | 109.8 | 121.1 | 271.7 | 331.8 | 25 | 107.2 | | | 61.4 | 62.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.9 | | 4.4 | 4.8 | 10.9 | 13.3 | 1.0 | 4.3 | | | 2.5 | 2.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 33.7 | | 34.3 | 26.2 | 29.1 | 31.9 | 19.4 | 18.4 | | | 17.6 | 17.7 |
| Incremental Delay ( $d_2$ ), s/veh | 0.8 | | 1.3 | 0.4 | 3.1 | 12.7 | 0.4 | 0.4 | | | 0.1 | 0.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 34.5 | | 35.6 | 26.6 | 32.3 | 44.7 | 19.8 | 18.8 | 0.0 | | 17.7 | 18.1 |
| Level of Service (LOS) | C | | D | C | C | D | B | B | A | | B | B |
| Approach Delay, s/veh / LOS | 35.1 | D | | 40.1 | D | | 14.3 | B | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 31.7 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 3.09 | C | 0.89 | A | 0.65 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

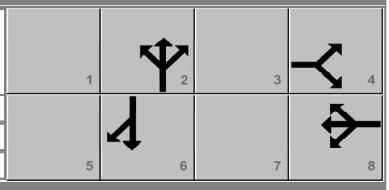


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 284 | 193 | 83 | 171 | 7 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.6 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

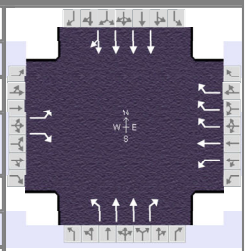
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 302 | 205 | 88 | 182 | 7 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 0.9 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 3.2 | 2.9 | 10.2 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.165 | 0.419 | 0.171 | 0.157 | 0.032 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 516.2 | 158.5 | 63.1 | 42.7 | 5.9 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 20.6 | 6.3 | 2.5 | 1.7 | 0.2 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.1 | 25.0 | 23.1 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 107.8 | 0.6 | 0.2 | 0.1 | 0.3 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 145.6 | 27.5 | 25.2 | 25.0 | 23.4 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 127.9 | | F | 26.2 | | C | 7.9 | | A | 20.2 | | C |
| Intersection Delay, s/veh / LOS | 36.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.27 | A | 0.76 | A | 0.93 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

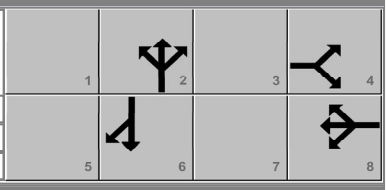


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 53 | | 326 | 193 | 113 | 171 | 13 | 131 | 174 | | 912 | 93 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 10.4 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.7 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.02 | | | | |

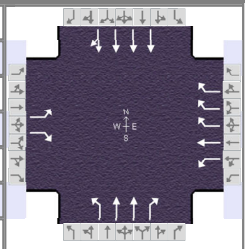
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 56 | | 347 | 205 | 120 | 182 | 14 | 139 | 185 | | 813 | 257 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 536 | 1809 | | | 1900 | 1777 |
| Queue Service Time ( $g_s$ ), s | 2.4 | | 14.5 | 8.4 | 4.4 | 2.9 | 1.7 | 2.2 | | | 9.1 | 9.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.4 | | 14.5 | 8.4 | 4.4 | 2.9 | 10.9 | 2.2 | | | 9.1 | 9.3 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 235 | 1415 | | | 2229 | 695 |
| Volume-to-Capacity Ratio ( *X* ) | 0.193 | | 1.337 | 0.419 | 0.233 | 0.157 | 0.059 | 0.098 | | | 0.364 | 0.369 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 47.9 | | 711 | 158.5 | 87.6 | 42.7 | 11.1 | 42.3 | | | 183 | 182.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 1.9 | | 28.4 | 6.3 | 3.5 | 1.7 | 0.4 | 1.7 | | | 7.3 | 7.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.7 | | 37.8 | 27.0 | 25.5 | 25.0 | 23.4 | 17.4 | | | 19.5 | 19.5 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 175.4 | 0.6 | 0.2 | 0.1 | 0.5 | 0.1 | | | 0.5 | 1.5 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.0 | | 213.1 | 27.5 | 25.8 | 25.0 | 23.9 | 17.5 | 0.0 | | 19.9 | 21.0 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | B | C |
| Approach Delay, s/veh / LOS | 188.0 | F | | 26.2 | C | | 8.2 | A | | 20.2 | C | |
| Intersection Delay, s/veh / LOS | 48.9 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.32 | A | 0.77 | A | 0.93 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 14, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

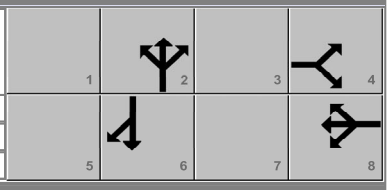


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 57 | | 304 | 207 | 90 | 61 | 8 | 70 | 202 | | 1408 | 100 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 11.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.1 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

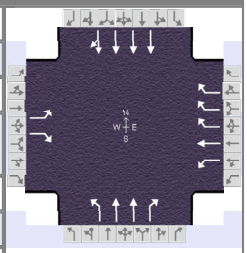
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 61 | | 323 | 220 | 96 | 65 | 9 | 74 | 215 | | 1217 | 387 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 321 | 1809 | | | 1900 | 1810 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 9.1 | 3.5 | 1.0 | 1.9 | 1.2 | | | 14.8 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 9.1 | 3.5 | 1.0 | 16.8 | 1.2 | | | 14.8 | 14.9 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 152 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.208 | | 1.247 | 0.449 | 0.186 | 0.056 | 0.056 | 0.053 | | | 0.546 | 0.547 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 51.7 | | 606 | 172.1 | 68.6 | 14.8 | 7.9 | 22.1 | | | 272.9 | 276.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.1 | | 24.2 | 6.9 | 2.7 | 0.6 | 0.3 | 0.9 | | | 10.9 | 11.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.8 | | 37.8 | 27.2 | 25.2 | 24.3 | 27.7 | 17.0 | | | 21.2 | 21.2 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 139.0 | 0.6 | 0.2 | 0.0 | 0.7 | 0.1 | | | 1.0 | 3.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 176.8 | 27.9 | 25.3 | 24.3 | 28.4 | 17.1 | 0.0 | | 22.2 | 24.2 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 154.1 | | F | 26.6 | | C | 5.1 | | A | 22.7 | | C |
| Intersection Delay, s/veh / LOS | 40.2 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.12 | A | 0.73 | A | 1.15 | A |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 08PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 57 | | 346 | 207 | 120 | 61 | 14 | 70 | 202 | | 1408 | 100 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 35.2 | 14.5 | 24.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.6 | 4.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| Red | 1.2 | 1.4 | 1.2 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | 4 | | 8 | | 2 | | 6 |
| Case Number | | 9.0 | | 9.0 | | 5.0 | | 8.0 |
| Phase Duration, s | | 20.0 | | 30.0 | | 40.0 | | 40.0 |
| Change Period, ( $Y+R_c$ ), s | | 5.5 | | 5.6 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | 4.3 | | 4.1 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | 16.5 | | 11.1 | | | | |
| Green Extension Time ( $g_e$ ), s | | 0.0 | | 1.2 | | 0.0 | | 0.0 |
| Phase Call Probability | | 1.00 | | 1.00 | | | | |
| Max Out Probability | | 1.00 | | 0.01 | | | | |

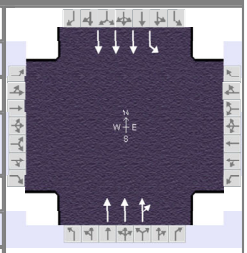
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 7 | | 14 | 3 | 8 | 18 | 5 | 2 | 12 | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | 61 | | 368 | 220 | 128 | 65 | 15 | 74 | 215 | | 1217 | 387 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1810 | | 1610 | 1810 | 1900 | 1425 | 321 | 1809 | | | 1900 | 1810 |
| Queue Service Time ( $g_s$ ), s | 2.6 | | 14.5 | 9.1 | 4.7 | 1.0 | 3.4 | 1.2 | | | 14.8 | 14.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 2.6 | | 14.5 | 9.1 | 4.7 | 1.0 | 18.3 | 1.2 | | | 14.8 | 14.9 |
| Green Ratio ( *g/C* ) | 0.16 | | 0.16 | 0.27 | 0.27 | 0.27 | 0.39 | 0.39 | | | 0.39 | 0.39 |
| Capacity ( *c* ), veh/h | 292 | | 259 | 491 | 515 | 1159 | 152 | 1415 | | | 2229 | 708 |
| Volume-to-Capacity Ratio ( *X* ) | 0.208 | | 1.419 | 0.449 | 0.248 | 0.056 | 0.098 | 0.053 | | | 0.546 | 0.547 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 51.7 | | 810.1 | 172.1 | 93.2 | 14.8 | 14.2 | 22.1 | | | 272.9 | 276.5 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 2.1 | | 32.4 | 6.9 | 3.7 | 0.6 | 0.6 | 0.9 | | | 10.9 | 11.1 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 32.8 | | 37.8 | 27.2 | 25.6 | 24.3 | 28.3 | 17.0 | | | 21.2 | 21.2 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | | 209.6 | 0.6 | 0.2 | 0.0 | 1.3 | 0.1 | | | 1.0 | 3.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | 33.1 | | 247.4 | 27.9 | 25.9 | 24.3 | 29.6 | 17.1 | 0.0 | | 22.2 | 24.2 |
| Level of Service (LOS) | C | | F | C | C | C | C | B | A | | C | C |
| Approach Delay, s/veh / LOS | 217.1 | | F | 26.7 | | C | 5.6 | | A | 22.7 | | C |
| Intersection Delay, s/veh / LOS | 51.7 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.71 | C | 2.60 | C | 2.45 | B | 1.91 | B |
| Bicycle LOS Score / LOS | | F | 1.17 | A | 0.74 | A | 1.15 | A |

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# HCS Signalized Intersection Results Summary

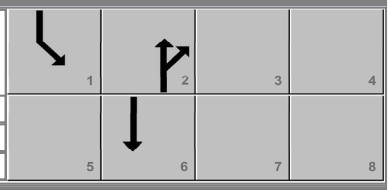
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 366 | 114 | 116 | 265 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.1 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

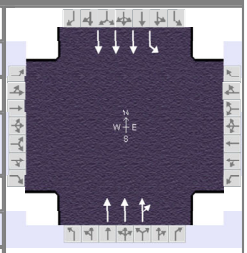
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 345 | 160 | 122 | 279 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1674 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.4 | 2.6 | 3.2 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 988 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.154 | 0.162 | 0.266 | 0.058 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.4 | 37.4 | 58.4 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.3 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.5 | 5.6 | 17.9 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.0 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 5.6 | | A |
| Intersection Delay, s/veh / LOS | 5.7 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.71 | A |

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# HCS Signalized Intersection Results Summary

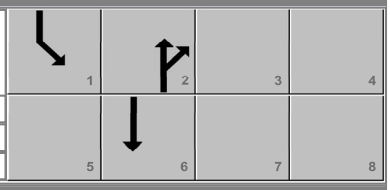
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 370 | 114 | 132 | 279 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 5.7 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

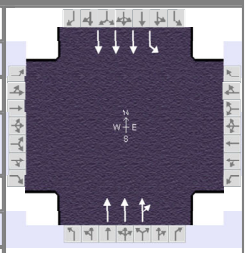
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 348 | 162 | 139 | 294 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1676 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 2.5 | 2.6 | 3.7 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 2.5 | 2.6 | 3.7 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 989 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.155 | 0.163 | 0.303 | 0.061 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 37.9 | 37.9 | 67.1 | 0.5 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.5 | 1.5 | 2.7 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.6 | 5.6 | 18.1 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.4 | 0.1 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.7 | 5.9 | 18.3 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.8 | | A | 6.0 | | A |
| Intersection Delay, s/veh / LOS | 5.9 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.77 | A | 0.73 | A |

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# HCS Signalized Intersection Results Summary

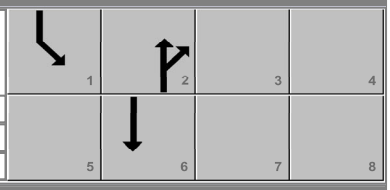
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 452 | 122 | 154 | 311 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.4 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.00 | |

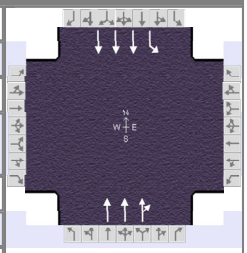
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 413 | 191 | 162 | 327 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1695 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.0 | 3.1 | 4.4 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.0 | 3.1 | 4.4 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1000 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.184 | 0.191 | 0.354 | 0.069 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 45.9 | 45.7 | 79.4 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.2 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.7 | 5.7 | 18.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.5 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.3 | | A |
| Intersection Delay, s/veh / LOS | 6.1 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.82 | A | 0.76 | A |

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# HCS Signalized Intersection Results Summary

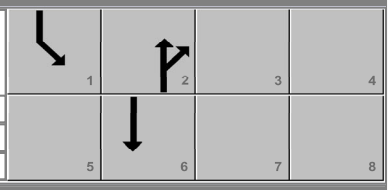
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - AM | PHF | 0.95 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 456 | 122 | 170 | 325 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 6.9 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.2 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 0.01 | |

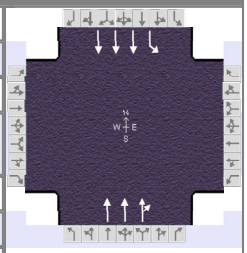
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 416 | 193 | 179 | 342 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1696 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 3.0 | 3.2 | 4.9 | 0.3 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 3.0 | 3.2 | 4.9 | 0.3 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1001 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.185 | 0.192 | 0.390 | 0.072 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 46.2 | 46.1 | 88.6 | 0.6 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.8 | 1.8 | 3.5 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.7 | 5.7 | 18.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.2 | 0.4 | 0.2 | 0.0 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.8 | 6.1 | 18.8 | 0.2 | |
| Level of Service (LOS) | | | | | | | | A | A | B | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.9 | | A | 6.6 | | A |
| Intersection Delay, s/veh / LOS | 6.2 | | | | | | A | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.82 | A | 0.77 | A |

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# HCS Signalized Intersection Results Summary

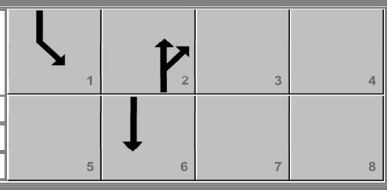
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 303 | 70 | 385 | 639 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 15.1 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

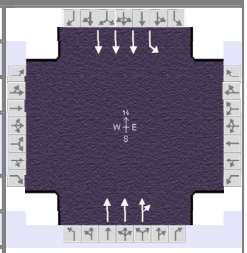
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 269 | 128 | 410 | 680 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1720 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 13.1 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1015 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.120 | 0.126 | 0.893 | 0.142 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 28.6 | 29.2 | 303.1 | 1.2 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.2 | 12.1 | 0.0 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 21.6 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 19.0 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 40.6 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 15.4 | | B |
| Intersection Delay, s/veh / LOS | 12.8 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.09 | A |

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# HCS Signalized Intersection Results Summary

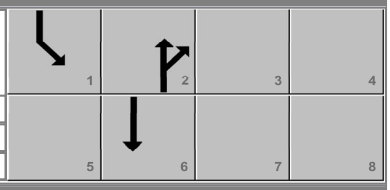
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Existing with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 309 | 70 | 407 | 659 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 16.1 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

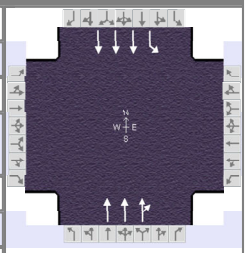
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 273 | 130 | 433 | 701 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1723 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.9 | 2.0 | 14.1 | 0.7 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.9 | 2.0 | 14.1 | 0.7 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1016 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.122 | 0.128 | 0.945 | 0.147 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 29 | 29.7 | 353.4 | 1.3 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.2 | 1.2 | 14.1 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.5 | 22.0 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.3 | 28.2 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 50.2 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | D | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 19.3 | | B |
| Intersection Delay, s/veh / LOS | 15.7 | | | | | | B | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.71 | A | 1.11 | A |

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# HCS Signalized Intersection Results Summary

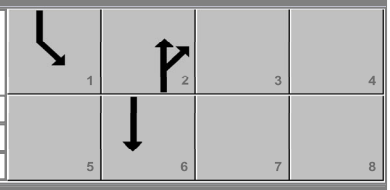
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 271 | 75 | 589 | 866 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

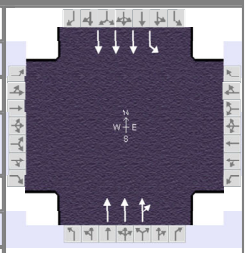
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 250 | 118 | 627 | 921 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1695 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.7 | 1.8 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.7 | 1.8 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1000 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.111 | 0.118 | 1.367 | 0.193 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 26.4 | 26.9 | 1099.2 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.1 | 44.0 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 178.6 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 201.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | A | | 81.6 | F | |
| Intersection Delay, s/veh / LOS | 67.0 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.69 | A | 1.34 | A |

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# HCS Signalized Intersection Results Summary

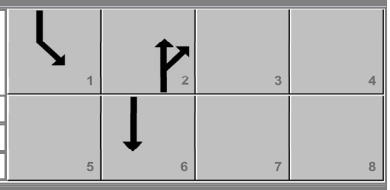
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles/ Caltrans | Time Period | Future with Project - PM | PHF | 0.94 |
| Urban Street | Universal Studios Boule… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 09PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | | | | | 277 | 75 | 611 | 886 | |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 60.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | On |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 15.2 | 35.4 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 3.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 1.2 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | | | 2 | 1 | 6 |
| Case Number | | | | | | 8.3 | 2.0 | 4.0 |
| Phase Duration, s | | | | | | 40.0 | 20.0 | 60.0 |
| Change Period, ( $Y+R_c$ ), s | | | | | | 4.6 | 4.8 | 4.6 |
| Max Allow Headway ( *MAH* ), s | | | | | | 0.0 | 3.3 | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | | | | 17.2 | |
| Green Extension Time ( $g_e$ ), s | | | | | | 0.0 | 0.0 | 0.0 |
| Phase Call Probability | | | | | | | 1.00 | |
| Max Out Probability | | | | | | | 1.00 | |

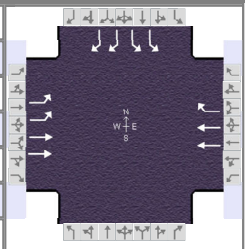
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | | | | | 2 | 12 | 1 | 6 | |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | | | | 254 | 121 | 650 | 943 | |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | | | | 1900 | 1698 | 1810 | 1725 | |
| Queue Service Time ( $g_s$ ), s | | | | | | | | 1.8 | 1.9 | 15.2 | 1.0 | |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | | | | 1.8 | 1.9 | 15.2 | 1.0 | |
| Green Ratio ( *g/C* ) | | | | | | | | 0.59 | 0.59 | 0.25 | 0.92 | |
| Capacity ( *c* ), veh/h | | | | | | | | 2242 | 1002 | 458 | 4779 | |
| Volume-to-Capacity Ratio ( *X* ) | | | | | | | | 0.113 | 0.120 | 1.418 | 0.197 | |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | | | | 26.8 | 27.3 | 1210.9 | 1.8 | |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | | | | 1.1 | 1.1 | 48.4 | 0.1 | |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | |
| Uniform Delay ( $d_1$ ), s/veh | | | | | | | | 5.4 | 5.4 | 22.4 | 0.2 | |
| Incremental Delay ( $d_2$ ), s/veh | | | | | | | | 0.1 | 0.2 | 200.6 | 0.1 | |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Control Delay ( *d* ), s/veh | | | | | | | | 5.5 | 5.7 | 223.0 | 0.3 | |
| Level of Service (LOS) | | | | | | | | A | A | F | A | |
| Approach Delay, s/veh / LOS | 0.0 | | | 0.0 | | | 5.6 | | A | 91.2 | | F |
| Intersection Delay, s/veh / LOS | 74.9 | | | | | | E | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.45 | B | 2.59 | C | 1.35 | A | 0.60 | A |
| Bicycle LOS Score / LOS | | | | | 0.69 | A | 1.36 | A |

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# HCS Signalized Intersection Results Summary

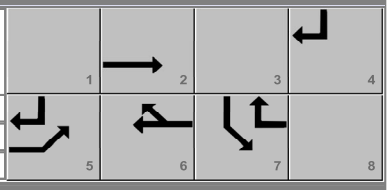
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 139 | | | | 120 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( *g s* ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( *g e* ), s | 1.0 | 0.0 | | 0.0 | | | | 2.1 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

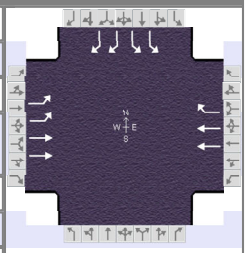
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 153 | | | | 132 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 12.1 | 47.4 | | | 9.5 | 3.7 | | | | 2.7 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.134 | | | | 0.089 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 53.9 | | | | 50.4 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.0 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.0 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.2 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.0 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.2 | C | | 0.0 | | | 15.7 | B | |
| Intersection Delay, s/veh / LOS | 33.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.91 | A | | | | F |

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# HCS Signalized Intersection Results Summary

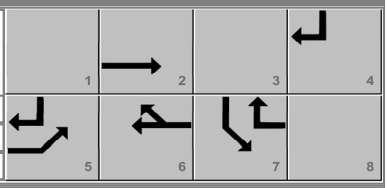
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 342 | 1447 | | | 330 | 143 | | | | 134 | | 147 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.3 |
| Queue Clearance Time ( $g_s$ ), s | 14.1 | | | | | | | 5.0 |
| Green Extension Time ( $g_e$ ), s | 1.0 | 0.0 | | 0.0 | | | | 2.2 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

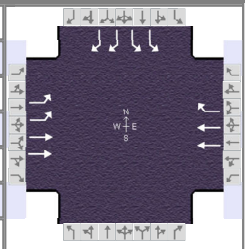
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 376 | 1590 | | | 363 | 157 | | | | 147 | | 162 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 12.1 | 47.4 | | | 9.5 | 3.8 | | | | 3.0 | | 3.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.672 | 0.886 | | | 0.349 | 0.138 | | | | 0.100 | | 0.098 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 234.1 | 716.8 | | | 192.1 | 55.5 | | | | 56.5 | | 42.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 9.4 | 28.7 | | | 7.7 | 2.2 | | | | 2.3 | | 1.7 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 47.5 | 27.2 | | | 33.9 | 5.7 | | | | 21.1 | | 11.3 |
| Incremental Delay ( $d_2$ ), s/veh | 3.5 | 6.9 | | | 0.9 | 0.3 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 51.0 | 34.1 | | | 34.8 | 5.9 | | | | 21.1 | | 11.3 |
| Level of Service (LOS) | D | C | | | C | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 37.3 | D | | 26.1 | C | | 0.0 | | | 16.0 | B | |
| Intersection Delay, s/veh / LOS | 32.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.11 | B | 0.92 | A | | | | F |

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# HCS Signalized Intersection Results Summary

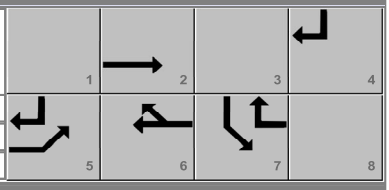
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 383 | 1651 | | | 407 | 192 | | | | 154 | | 160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 15.7 | | | | | | | 5.5 |
| Green Extension Time ( *g e* ), s | 0.8 | 0.0 | | 0.0 | | | | 2.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

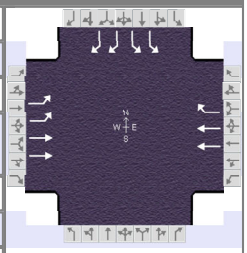
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 421 | 1814 | | | 447 | 211 | | | | 169 | | 176 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 13.7 | 59.5 | | | 12.1 | 5.3 | | | | 3.5 | | 3.3 |
| Cycle Queue Clearance Time ( *g c* ), s | 13.7 | 59.5 | | | 12.1 | 5.3 | | | | 3.5 | | 3.3 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.752 | 1.011 | | | 0.430 | 0.185 | | | | 0.115 | | 0.107 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 264.7 | 993.7 | | | 231.9 | 77.6 | | | | 65.4 | | 46.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.6 | 39.7 | | | 9.3 | 3.1 | | | | 2.6 | | 1.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 48.2 | 30.3 | | | 34.8 | 5.9 | | | | 21.2 | | 11.3 |
| Incremental Delay ( *d 2* ), s/veh | 6.1 | 24.1 | | | 1.3 | 0.4 | | | | 0.0 | | 0.0 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 54.3 | 54.4 | | | 36.1 | 6.3 | | | | 21.3 | | 11.4 |
| Level of Service (LOS) | D | F | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 54.3 | D | | 26.5 | C | | 0.0 | | | 16.2 | B | |
| Intersection Delay, s/veh / LOS | 44.6 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 1.03 | A | | | | F |

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# HCS Signalized Intersection Results Summary

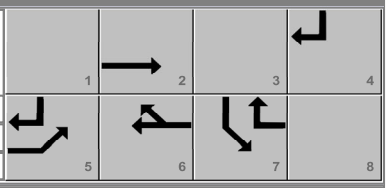
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.91 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 9:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 383 | 1651 | | | 407 | 196 | | | | 168 | | 160 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 15.7 | | | | | | | 5.9 |
| Green Extension Time ( $g_e$ ), s | 0.8 | 0.0 | | 0.0 | | | | 2.6 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 1.00 | | | | | | | 0.00 |

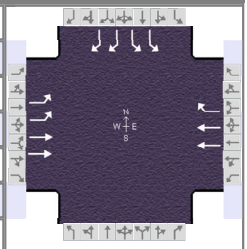
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 421 | 1814 | | | 447 | 215 | | | | 185 | | 176 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 13.7 | 59.5 | | | 12.1 | 5.4 | | | | 3.9 | | 3.3 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 13.7 | 59.5 | | | 12.1 | 5.4 | | | | 3.9 | | 3.3 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.752 | 1.011 | | | 0.430 | 0.189 | | | | 0.125 | | 0.107 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 264.7 | 993.7 | | | 231.9 | 79.3 | | | | 71.7 | | 46.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 10.6 | 39.7 | | | 9.3 | 3.2 | | | | 2.9 | | 1.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 48.2 | 30.3 | | | 34.8 | 5.9 | | | | 21.3 | | 11.3 |
| Incremental Delay ( $d_2$ ), s/veh | 6.1 | 24.1 | | | 1.3 | 0.4 | | | | 0.1 | | 0.0 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 54.3 | 54.4 | | | 36.1 | 6.3 | | | | 21.4 | | 11.4 |
| Level of Service (LOS) | D | F | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 54.3 | D | | 26.4 | C | | 0.0 | | | 16.5 | B | |
| Intersection Delay, s/veh / LOS | 44.5 | | | | | | D | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 2.33 | B | 1.03 | A | | | | F |

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# HCS Signalized Intersection Results Summary

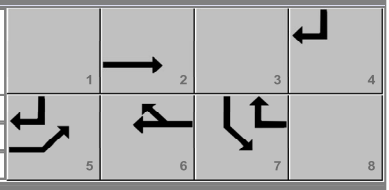
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 204 | | | | 347 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 7.6 | | | | | | | 10.3 |
| Green Extension Time ( *g e* ), s | 0.7 | 0.0 | | 0.0 | | | | 5.3 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

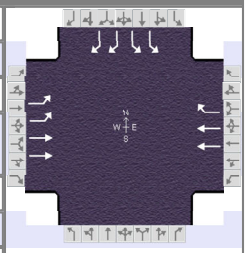
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 219 | | | | 373 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Cycle Queue Clearance Time ( *g c* ), s | 5.6 | 23.1 | | | 16.5 | 5.5 | | | | 8.3 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.193 | | | | 0.253 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 81 | | | | 153.7 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.2 | | | | 6.1 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 44.8 | 21.1 | | | 36.3 | 5.9 | | | | 22.6 | | 12.0 |
| Incremental Delay ( *d 2* ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.3 | | | | 22.7 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.7 | C | | 0.0 | | | 17.8 | B | |
| Intersection Delay, s/veh / LOS | 25.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.15 | A | | | | F |

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# HCS Signalized Intersection Results Summary

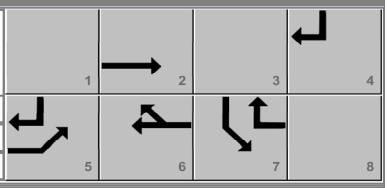
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2020 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 173 | 930 | | | 543 | 210 | | | | 367 | | 298 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 7.6 | | | | | | | 10.8 |
| Green Extension Time ( $g_e$ ), s | 0.7 | 0.0 | | 0.0 | | | | 5.5 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.03 | | | | | | | 0.00 |

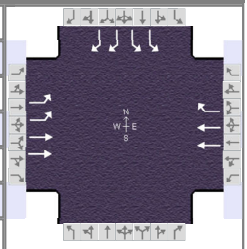
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 186 | 1000 | | | 584 | 226 | | | | 395 | | 320 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 5.6 | 23.1 | | | 16.5 | 5.7 | | | | 8.8 | | 6.4 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.333 | 0.557 | | | 0.561 | 0.198 | | | | 0.267 | | 0.194 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 111.8 | 372.4 | | | 299.8 | 83.7 | | | | 163.8 | | 89.4 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 4.5 | 14.9 | | | 12.0 | 3.3 | | | | 6.6 | | 3.6 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.8 | 21.1 | | | 36.3 | 6.0 | | | | 22.7 | | 12.0 |
| Incremental Delay ( $d_2$ ), s/veh | 0.5 | 1.3 | | | 2.2 | 0.4 | | | | 0.1 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 45.3 | 22.3 | | | 38.5 | 6.4 | | | | 22.9 | | 12.1 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 25.9 | C | | 29.5 | C | | 0.0 | | | 18.0 | B | |
| Intersection Delay, s/veh / LOS | 24.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.47 | A | 1.16 | A | | | | F |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

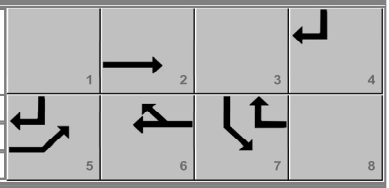


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 124 | 1109 | | | 698 | 227 | | | | 551 | | 321 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( *Y+R c* ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( *g s* ), s | 6.0 | | | | | | | 16.1 |
| Green Extension Time ( *g e* ), s | 0.5 | 0.0 | | 0.0 | | | | 7.4 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

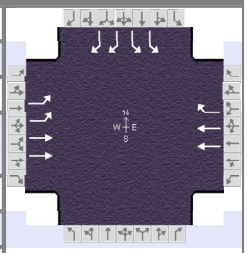
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 133 | 1192 | | | 751 | 244 | | | | 592 | | 345 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( *g s* ), s | 4.0 | 29.7 | | | 22.4 | 6.3 | | | | 14.1 | | 7.0 |
| Cycle Queue Clearance Time ( *g c* ), s | 4.0 | 29.7 | | | 22.4 | 6.3 | | | | 14.1 | | 7.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.238 | 0.665 | | | 0.722 | 0.214 | | | | 0.401 | | 0.209 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 78.7 | 462.5 | | | 392 | 91.9 | | | | 245 | | 97.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 18.5 | | | 15.7 | 3.7 | | | | 9.8 | | 3.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | 44.1 | 22.8 | | | 38.4 | 6.1 | | | | 24.3 | | 12.1 |
| Incremental Delay ( *d 2* ), s/veh | 0.3 | 2.0 | | | 4.3 | 0.4 | | | | 0.3 | | 0.1 |
| Initial Queue Delay ( *d 3* ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 24.7 | | | 42.8 | 6.5 | | | | 24.5 | | 12.2 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 26.7 | C | | 33.9 | C | | 0.0 | | | 20.0 | B | |
| Intersection Delay, s/veh / LOS | 27.0 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.58 | B | 1.31 | A | | | | F |

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# HCS Signalized Intersection Results Summary

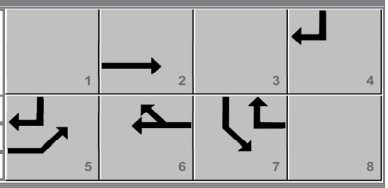
| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan, Engineers | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.93 |
| Urban Street | Cahuenga Boulevard W… | Analysis Year | 2027 | Analysis Period | 1> 17:00 |
| Intersection | Universal Studios Blvd/… | File Name | 10PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | 124 | 1109 | | | 698 | 233 | | | | 571 | | 321 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 120.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |

| | | | | | | |
|---|---|---|---|---|---|---|
| Green | 19.1 | 34.5 | 50.4 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 4.1 | 3.6 | 0.0 | 0.0 | 0.0 |
| Red | 1.9 | 1.4 | 1.0 | 0.0 | 0.0 | 0.0 |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | 5 | 2 | | 6 | | | | 4 |
| Case Number | 2.0 | 4.0 | | 7.3 | | | | 9.0 |
| Phase Duration, s | 25.0 | 65.0 | | 40.0 | | | | 55.0 |
| Change Period, ( $Y+R_c$ ), s | 5.9 | 5.5 | | 5.5 | | | | 4.6 |
| Max Allow Headway ( *MAH* ), s | 5.1 | 0.0 | | 0.0 | | | | 5.2 |
| Queue Clearance Time ( $g_s$ ), s | 6.0 | | | | | | | 16.7 |
| Green Extension Time ( $g_e$ ), s | 0.5 | 0.0 | | 0.0 | | | | 7.6 |
| Phase Call Probability | 1.00 | | | | | | | 1.00 |
| Max Out Probability | 0.00 | | | | | | | 0.02 |

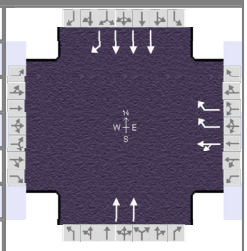
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | 5 | 2 | | | 6 | 16 | | | | 7 | | 14 |
| Adjusted Flow Rate ( *v* ), veh/h | 133 | 1192 | | | 751 | 251 | | | | 614 | | 345 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | 1757 | 1809 | | | 1809 | 1610 | | | | 1757 | | 1425 |
| Queue Service Time ( $g_s$ ), s | 4.0 | 29.7 | | | 22.4 | 6.5 | | | | 14.7 | | 7.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | 4.0 | 29.7 | | | 22.4 | 6.5 | | | | 14.7 | | 7.0 |
| Green Ratio ( *g/C* ) | 0.16 | 0.50 | | | 0.29 | 0.71 | | | | 0.42 | | 0.58 |
| Capacity ( *c* ), veh/h | 559 | 1794 | | | 1040 | 1139 | | | | 1476 | | 1651 |
| Volume-to-Capacity Ratio ( *X* ) | 0.238 | 0.665 | | | 0.722 | 0.220 | | | | 0.416 | | 0.209 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | 78.7 | 462.5 | | | 392 | 95 | | | | 253.5 | | 97.3 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | 3.1 | 18.5 | | | 15.7 | 3.8 | | | | 10.1 | | 3.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | 0.00 | 0.00 | | | 0.00 | 0.00 | | | | 0.00 | | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | 44.1 | 22.8 | | | 38.4 | 6.1 | | | | 24.5 | | 12.1 |
| Incremental Delay ( $d_2$ ), s/veh | 0.3 | 2.0 | | | 4.3 | 0.4 | | | | 0.3 | | 0.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 |
| Control Delay ( *d* ), s/veh | 44.4 | 24.7 | | | 42.8 | 6.5 | | | | 24.7 | | 12.2 |
| Level of Service (LOS) | D | C | | | D | A | | | | C | | B |
| Approach Delay, s/veh / LOS | 26.7 | C | | 33.7 | C | | 0.0 | | | 20.2 | C | |
| Intersection Delay, s/veh / LOS | 26.9 | | | | | | C | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 0.71 | A | 2.47 | B | 2.31 | B | 2.47 | B |
| Bicycle LOS Score / LOS | 1.58 | B | 1.31 | A | | | | F |

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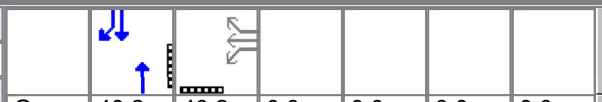
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 109 | 1800 | | 774 | | | 2181 | 196 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( *Y+R c* ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( *g s* ), s | | | | 42.2 | | | | |
| Green Extension Time ( *g e* ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

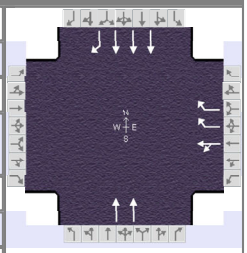
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 293 | 1818 | | 782 | | | 2203 | 198 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( *g s* ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Cycle Queue Clearance Time ( *g c* ), s | | | | | 9.4 | 40.2 | | 13.7 | | | 36.9 | 7.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.356 | 1.428 | | 0.484 | | | 0.953 | 0.306 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 167.5 | 1805.5 | | 236.6 | | | 563.5 | 120.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.7 | 72.2 | | 9.5 | | | 22.5 | 4.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( *d 1* ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.0 |
| Incremental Delay ( *d 2* ), s/veh | | | | | 0.3 | 197.3 | | 1.0 | | | 10.5 | 1.2 |
| Initial Queue Delay ( *d 3* ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.6 | 222.2 | | 18.6 | | | 34.5 | 17.2 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.7 | | F | 18.6 | | B | 33.1 | | C |
| Intersection Delay, s/veh / LOS | 95.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.97 | D | 1.13 | A | 1.81 | B |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

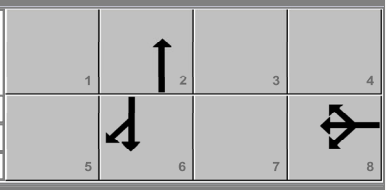


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 181 | 115 | 1800 | | 785 | | | 2181 | 211 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

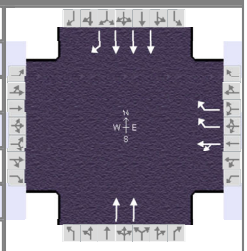
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 299 | 1818 | | 793 | | | 2203 | 213 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1844 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 9.6 | 40.2 | | 14.0 | | | 36.9 | 8.6 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 9.6 | 40.2 | | 14.0 | | | 36.9 | 8.6 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.363 | 1.428 | | 0.491 | | | 0.953 | 0.329 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 171.7 | 1805.5 | | 240.1 | | | 563.5 | 131.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 6.9 | 72.2 | | 9.6 | | | 22.5 | 5.3 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.4 | 24.9 | | 17.6 | | | 24.0 | 16.2 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 197.3 | | 1.1 | | | 10.5 | 1.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 16.7 | 222.2 | | 18.7 | | | 34.5 | 17.5 |
| Level of Service (LOS) | | | | | B | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 193.2 | | F | 18.7 | | B | 33.0 | | C |
| Intersection Delay, s/veh / LOS | 94.6 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 3.98 | D | 1.14 | A | 1.82 | B |

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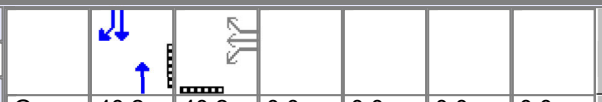
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |

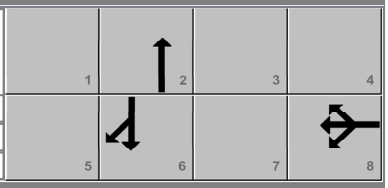


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 201 | 117 | 1915 | | 856 | | | 2366 | 261 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

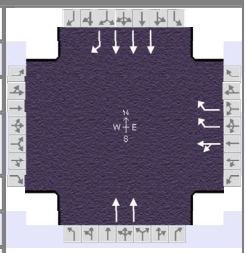
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 321 | 1934 | | 865 | | | 2390 | 264 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1842 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 10.5 | 40.2 | | 15.6 | | | 40.2 | 11.1 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 10.5 | 40.2 | | 15.6 | | | 40.2 | 11.1 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.390 | 1.520 | | 0.535 | | | 1.034 | 0.407 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 187.4 | 2108.3 | | 263.3 | | | 730 | 171.2 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.5 | 84.3 | | 10.5 | | | 29.2 | 6.8 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.7 | 24.9 | | 18.1 | | | 24.9 | 16.8 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 237.8 | | 1.3 | | | 28.1 | 1.9 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 17.0 | 262.7 | | 19.4 | | | 53.0 | 18.7 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 227.7 | | F | 19.4 | | B | 49.6 | | D |
| Intersection Delay, s/veh / LOS | 114.7 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.21 | D | 1.20 | A | 1.95 | B |

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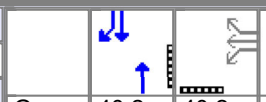
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - AM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 8:15 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11AM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

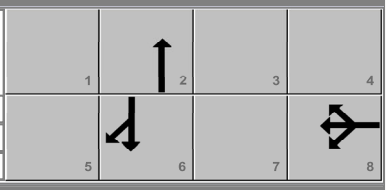


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 201 | 123 | 1915 | | 867 | | | 2366 | 276 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.3 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

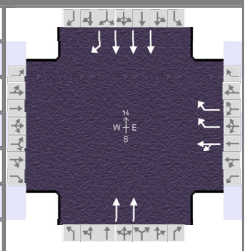
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 327 | 1934 | | 876 | | | 2390 | 279 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1843 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 10.8 | 40.2 | | 15.9 | | | 40.2 | 11.9 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 10.8 | 40.2 | | 15.9 | | | 40.2 | 11.9 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 823 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.398 | 1.520 | | 0.542 | | | 1.034 | 0.431 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 190.9 | 2108.3 | | 266.9 | | | 730 | 183.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 7.6 | 84.3 | | 10.7 | | | 29.2 | 7.4 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 16.8 | 24.9 | | 18.2 | | | 24.9 | 17.1 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 0.3 | 237.8 | | 1.3 | | | 28.1 | 2.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 17.1 | 262.7 | | 19.5 | | | 53.0 | 19.1 |
| Level of Service (LOS) | | | | | B | F | | B | | | F | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 227.2 | | F | 19.5 | | B | 49.5 | | D |
| Intersection Delay, s/veh / LOS | 114.2 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.22 | D | 1.21 | A | 1.96 | B |

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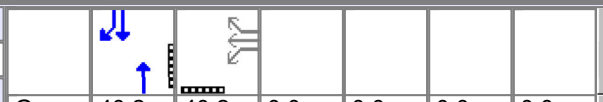
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing.xus | | |
| Project Description | Hilton Universal City | | | | |

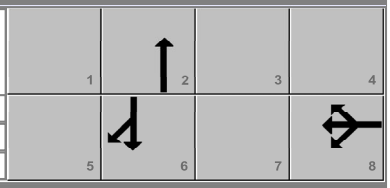


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 350 | 1768 | | 659 | | | 1953 | 198 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

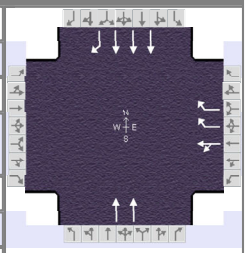
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 570 | 1786 | | 666 | | | 1973 | 200 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 21.9 | 40.2 | | 11.2 | | | 30.7 | 8.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.684 | 1.403 | | 0.412 | | | 0.853 | 0.309 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 353.2 | 1722.2 | | 201.4 | | | 452.1 | 122 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.1 | 68.9 | | 8.1 | | | 18.1 | 4.9 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 19.8 | 24.9 | | 16.9 | | | 22.3 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 2.3 | 186.1 | | 0.8 | | | 4.3 | 1.2 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.2 | 211.0 | | 17.7 | | | 26.5 | 17.2 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 165.3 | | F | 17.7 | | B | 25.7 | | C |
| Intersection Delay, s/veh / LOS | 88.0 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.37 | D | 1.04 | A | 1.68 | B |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Existing with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2020 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Existing with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

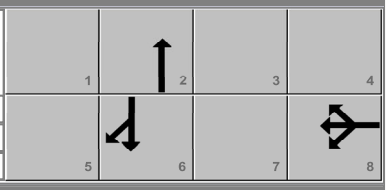


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 214 | 359 | 1768 | | 675 | | | 1953 | 220 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

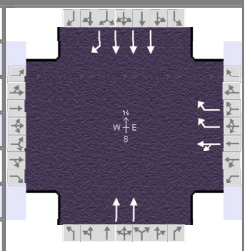
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 579 | 1786 | | 682 | | | 1973 | 222 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1865 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 22.4 | 40.2 | | 11.6 | | | 30.7 | 9.0 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 22.4 | 40.2 | | 11.6 | | | 30.7 | 9.0 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 833 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.695 | 1.403 | | 0.422 | | | 0.853 | 0.343 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 361 | 1722.2 | | 206 | | | 452.1 | 138.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 14.4 | 68.9 | | 8.2 | | | 18.1 | 5.5 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.0 | 24.9 | | 17.0 | | | 22.3 | 16.3 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 2.5 | 186.1 | | 0.8 | | | 4.3 | 1.4 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 22.5 | 211.0 | | 17.8 | | | 26.5 | 17.7 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 164.9 | | F | 17.8 | | B | 25.6 | | C |
| Intersection Delay, s/veh / LOS | 87.4 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.39 | D | 1.05 | A | 1.69 | B |

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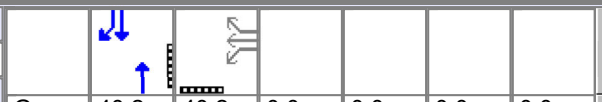
# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future.xus | | |
| Project Description | Hilton Universal City | | | | |



| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 252 | 375 | 1960 | | 773 | | | 2140 | 181 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

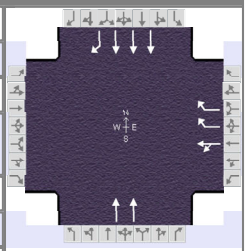
| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 633 | 1980 | | 781 | | | 2162 | 183 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1863 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 25.7 | 40.2 | | 13.7 | | | 35.7 | 7.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 25.7 | 40.2 | | 13.7 | | | 35.7 | 7.2 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 832 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.761 | 1.555 | | 0.483 | | | 0.935 | 0.282 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 412.8 | 2227.9 | | 236.3 | | | 538.1 | 109.8 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 16.5 | 89.1 | | 9.5 | | | 21.5 | 4.4 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 20.9 | 24.9 | | 17.6 | | | 23.7 | 15.8 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 4.2 | 253.7 | | 1.0 | | | 8.6 | 1.1 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 25.0 | 278.6 | | 18.6 | | | 32.3 | 16.9 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 217.2 | | F | 18.6 | | B | 31.1 | | C |
| Intersection Delay, s/veh / LOS | 114.1 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.80 | E | 1.13 | A | 1.78 | B |

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# HCS Signalized Intersection Results Summary

| General Information | | | | Intersection Information | |
|---|---|---|---|---|---|
| Agency | Linscott, Law & Greenspan | | | Duration, h | 0.250 |
| Analyst | JAS | Analysis Date | Mar 15, 2023 | Area Type | Other |
| Jurisdiction | City of Los Angeles | Time Period | Future with Project - PM | PHF | 0.99 |
| Urban Street | Barham Boulevard | Analysis Year | 2027 | Analysis Period | 1> 16:30 |
| Intersection | Barham/W.C.Fields Dr-… | File Name | 11PM - Future with Project.xus | | |
| Project Description | Hilton Universal City | | | | |

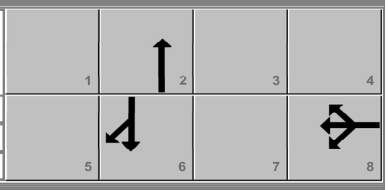


| Demand Information | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Demand ( *v* ), veh/h | | | | 252 | 384 | 1960 | | 789 | | | 2140 | 203 |

| Signal Information | | | |
|---|---|---|---|
| Cycle, s | 90.0 | Reference Phase | 2 |
| Offset, s | 0 | Reference Point | End |
| Uncoordinated | No | Simult. Gap E/W | On |
| Force Mode | Fixed | Simult. Gap N/S | Off |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Green | 40.2 | 40.2 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Yellow | 4.1 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Red | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | |




| Timer Results | EBL | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|---|
| Assigned Phase | | | | 8 | | 2 | | 6 |
| Case Number | | | | 11.0 | | 8.0 | | 7.0 |
| Phase Duration, s | | | | 45.0 | | 45.0 | | 45.0 |
| Change Period, ( $Y+R_c$ ), s | | | | 4.8 | | 4.8 | | 4.8 |
| Max Allow Headway ( *MAH* ), s | | | | 4.2 | | 0.0 | | 0.0 |
| Queue Clearance Time ( $g_s$ ), s | | | | 42.2 | | | | |
| Green Extension Time ( $g_e$ ), s | | | | 0.0 | | 0.0 | | 0.0 |
| Phase Call Probability | | | | 1.00 | | | | |
| Max Out Probability | | | | 1.00 | | | | |

| Movement Group Results | EB | | | WB | | | NB | | | SB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach Movement | L | T | R | L | T | R | L | T | R | L | T | R |
| Assigned Movement | | | | 3 | 8 | 18 | | 2 | | | 6 | 16 |
| Adjusted Flow Rate ( *v* ), veh/h | | | | | 642 | 1980 | | 797 | | | 2162 | 205 |
| Adjusted Saturation Flow Rate ( *s* ), veh/h/ln | | | | | 1863 | 1425 | | 1809 | | | 1725 | 1449 |
| Queue Service Time ( $g_s$ ), s | | | | | 26.2 | 40.2 | | 14.1 | | | 35.7 | 8.2 |
| Cycle Queue Clearance Time ( $g_c$ ), s | | | | | 26.2 | 40.2 | | 14.1 | | | 35.7 | 8.2 |
| Green Ratio ( *g/C* ) | | | | | 0.45 | 0.45 | | 0.45 | | | 0.45 | 0.45 |
| Capacity ( *c* ), veh/h | | | | | 832 | 1273 | | 1616 | | | 2312 | 647 |
| Volume-to-Capacity Ratio ( *X* ) | | | | | 0.772 | 1.555 | | 0.493 | | | 0.935 | 0.317 |
| Back of Queue ( *Q* ), ft/ln ( 95 th percentile) | | | | | 422.1 | 2227.9 | | 241.5 | | | 538.1 | 125.7 |
| Back of Queue ( *Q* ), veh/ln ( 95 th percentile) | | | | | 16.9 | 89.1 | | 9.7 | | | 21.5 | 5.0 |
| Queue Storage Ratio ( *RQ* ) ( 95 th percentile) | | | | | 0.00 | 0.00 | | 0.00 | | | 0.00 | 0.00 |
| Uniform Delay ( $d_1$ ), s/veh | | | | | 21.0 | 24.9 | | 17.7 | | | 23.7 | 16.0 |
| Incremental Delay ( $d_2$ ), s/veh | | | | | 4.5 | 253.7 | | 1.1 | | | 8.6 | 1.3 |
| Initial Queue Delay ( $d_3$ ), s/veh | | | | | 0.0 | 0.0 | | 0.0 | | | 0.0 | 0.0 |
| Control Delay ( *d* ), s/veh | | | | | 25.5 | 278.6 | | 18.8 | | | 32.3 | 17.3 |
| Level of Service (LOS) | | | | | C | F | | B | | | C | B |
| Approach Delay, s/veh / LOS | 0.0 | | | 216.6 | | F | 18.8 | | B | 31.0 | | C |
| Intersection Delay, s/veh / LOS | 113.5 | | | | | | F | | | | | |

| Multimodal Results | EB | | WB | | NB | | SB | |
|---|---|---|---|---|---|---|---|---|
| Pedestrian LOS Score / LOS | 2.30 | B | 2.46 | B | 1.94 | B | 1.39 | A |
| Bicycle LOS Score / LOS | | | 4.81 | E | 1.15 | A | 1.79 | B |

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FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN23-55316

Date: May 10, 2023

To: Brenda Kahinju, Administrative Clerk
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **UPDATED TRANSPORTATION ASSESSMENT ADDENDUM FOR THE PROPOSED REVISED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

On October 20, 2022, the Los Angeles Department of Transportation (LADOT) issued a transportation assessment addendum report to the Department of City Planning (**Attachment A1**) for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC) based on the transportation analyses prepared by Linscott, Law & Greenspan, Engineers (LLG), dated September 19, 2022 and October 14, 2022. However, since the report was released, the project description has been modified and an updated addendum transportation analysis dated April 14, 2023 was prepared by LLG.

The current project proposal compares to the original project as follows:

| | **Previous Project (2022)** | **Current Project (2023)** |
|---|---|---|
| **Hotel** | 395 Guestrooms | |
| **Quality Restaurant** | 5,950 square feet (sf) | 7,232 sf |
| **High-Turnover Restaurant** | 6,050 sf | 7,945 sf |
| **Bar and Lounge** | -- | 1,590 sf |
| **Spa** | 9,570 sf | 8,630 sf |
| **Ancillary Meeting Room** | 3,425 sf | 3,400 sf |
| **Vehicle Parking** | 464 new spaces (Total 1,116) | |
| **Bicycle Parking** | 62 spaces<br>(31 short-term/31 long-term) | 118 spaces<br>(54 short-term/64 long-term) |
| **Completion Year** | 2027 | |

The April 14, 2023 addendum included updates of the following: California Environmental Quality Act (CEQA) transportation analysis including the Vehicle Miles Traveled (VMT) analysis (**Attachment A2**) and the Non-CEQA transportation analysis. LADOT concurs with the results of the updated assessment that the current project's expected impacts would continue to be less than significant. It should be noted that the intersections of Universal Studios Boulevard and W.C. Fields Drive and Universal Studios Boulevard and US-101 Southbound On-Ramp may experience adverse conditions due to the project. However, since these intersections are outside of the City's jurisdiction and Universal Studios Boulevard is a private street, the project would not contribute to unacceptable queuing on an Avenue or Boulevard. Therefore, LADOT concurs that the project is not required to complete the corrective measures listed in LADOT's December 18, 2020 assessment letter (**Attachment 1**). All of the other project requirements that are identified in LADOT's October 20, 2022 letter (**Attachment A1**) shall remain in effect.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2023\CEN23-55316_555 Universal Hollywood_Hilton Hotel_rev ltr 230510.docx*

c: Mashael Majid, Council District 4
Hokchii Chiu, Central District, BOE
Steve Rostam, East Valley District, DOT & Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN22-54260

Date: October 20, 2022

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT ADDENDUM FOR THE PROPOSED REVISED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

On December 18, 2020, the Los Angeles Department of Transportation (LADOT) issued a transportation assessment report to the Department of City Planning (**Attachment 1**) for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC) based on the transportation analyses prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020. However, since the report was released, the project description has been modified: additional restaurant use type, smaller meeting room space, omission of the ballroom, site plan (**Attachment 2**) and later project completion date; addendum transportation analyses dated September 19, 2022 and October 14, 2022 were prepared by LLG: and LADOT published an updated version of the LADOT's Transportation Assessment Guidelines (TAG) dated August 2022.

The current project proposal compares to the original project as follows:

| **Land Use** | **Original Project (2020)** | **Current Project (2022)** |
|---|---|---|
| Hotel | 395 Guestrooms | 395 Guestrooms |
| Quality Restaurant | 12,000 square feet (sf) | 5,950 sf |
| High-Turnover Restaurant | --- | 6,050 sf |
| Spa | 10,000 sf | 9,570 sf |
| Ancillary Ballroom | 5,000 sf | --- |
| Ancillary Meeting Room | 10,000 sf | 3,425 sf |
| Vehicle Parking | 408 new spaces<br>(Total 1,060) | 464 new spaces<br>(Total 1,116) |
| Bicycle Parking | 73 spaces<br>(43 short-term/30 long-term) | 62 spaces<br>(31 short-term/31 long-term) |
| Completion Year | 2025 | 2027 |

The September 19 and October 14, 2022 analyses included updates of the following: related projects, CEQA VMT (Vehicle Miles Travelled) analysis (**Attachment 3**), CEQA Geometric Design Analysis, and Non-

CEQ Project Access and Circulation Review. LADOT concurs with the results of the updated assessments that based on the latest TAG dated August 2022, the project's expected impacts would continue to be less than significant. All of the project requirements that are identified in LADOT's December 18, 2020 letter (**Attachment 1**) shall remain in effect.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

*K:\Letters\2022\CEN22-54260_555 Universal Hollywood_Hilton Hotel Expansion_rev.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Hokchii Chiu, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

FORM GEN. 160A (Rev. 1/82)

# CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

555 E Universal Hollywood Dr
DOT Case No. CEN18-46906

Date: December 18, 2020

To: Milena Zasadzien, Senior City Planner
Department of City Planning

From: Wes Pringle, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED HILTON UNIVERSAL CITY HOTEL EXPANSION PROJECT LOCATED AT 555 EAST UNIVERSAL HOLLYWOOD DRIVE (ENV-2017-5424-EIR/CPC-2017-5423-VZC-HD-CU-CUB-CUX-DD-SPR)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessments prepared by Linscott, Law & Greenspan, Engineers (LLG), dated November and December 2020, for the proposed Hilton Universal City hotel expansion project located at 555 East Universal Hollywood Drive in the South Valley Area Planning Commission (APC). In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

## DISCUSSION AND FINDINGS

A. Project Description

The project proposes to expand the existing Hilton Universal City hotel with the construction of a 20-story building (Hotel Expansion Building) and the addition to the existing ancillary hotel building (Junior Ballroom/Meeting Room Addition) on the southern portion of the project site generally bounded by Universal Hollywood Drive to the north, W.C. Fields Drive to the south, a surface parking lot and Hotel Drive to the east, and the Sheraton Universal Hotel to the west as illustrated in **Attachment A**. The Hotel Expansion Building would include up to 395 hotel guestrooms, 12,000 feet of quality restaurant floor area, and 10,000 square feet of spa floor area for hotel guests and non-guest members. The Junior Ballroom/Meeting Room Addition would include 10,000 square feet of ancillary meeting space and 5,000 square feet of ancillary ballroom space. The project will provide 408 additional vehicle parking spaces on-site by expanding the existing parking garage with three levels of parking below the Junior Ballroom/Meeting Room Addition, providing surface parking along the existing service road, and adding new parking spaces along the project site's internal roadway. The project will provide 73 (43 short-term and 30 long-term) bicycle parking spaces on-site. All loading activities including passenger drop-off and pick-up will continue to occur within the project site. Access to the project will continue to be provided via the existing full-access driveway along Universal Hollywood Drive. The project is expected to be completed by 2025.

B. Freeway Safety Analysis

Per the Interim Guidance for Freeway Safety Analysis memorandum issued by LADOT on May 1, 2020 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline.

The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at US-101 Freeway Southbound Off-Ramp at Lankershim Boulevard would exceed 25 peak hour trips. Therefore, the assessment included a freeway ramp analysis which determined that the project would cause a less than significant freeway impact.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) Strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1, T-2.1 and T-3. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator Project Screening Criteria Summary page is provided as **Attachment B** to this report.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criteria in determining transportation impacts under CEQA. The new LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South Valley APC, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 9.4
- Work VMT per Employee: 11.6

Without taking any trip reductions resulting from the application of TDM Strategies, the proposed project is projected to have no Household VMT and a Work VMT per capita of 9.9. Therefore, it is concluded that implementation of the project would have a less than significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**. Although the project will have a less than significant impact, the project will continue to implement the TDM strategies currently in place, which will further reduce its Work VMT per capita to 8.7. These TDM strategies include employee transit subsidies, promotions and marketing, include bike parking per Los Angeles Municipal Code (LAMC), and include secure bike parking and showers.

E. Access and Circulation

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed. In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed project will likely result in adverse circulation conditions at: Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive, Universal Studios Boulevard and W.C. Fields Drive, and Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp. LADOT has reviewed this analysis and determined that it adequately discloses operational concerns. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report.

**PROJECT REQUIREMENTS**

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Potential Corrective Measures

As required by the TAG and pursuant to the City's Site Plan Review authority, the analysis included a review of current deficiencies and potential future deficiencies that may result from the project. The potential future deficiencies would occur at three locations outside of the City's jurisdiction:

a. Lankershim Boulevard and Campo de Cahuenga Way – Universal Hollywood Drive: The queue length on the westbound Universal Hollywood Drive right-turn approach would increase to approximately six-car lengths due to the project in the PM Peak Hour. Because Universal Hollywood Drive is a private street and the intersection is completely built out, there are no feasible physical modifications or improvements for this intersection.

b. Universal Studios Boulevard and W.C. Fields Drive:
Universal Studios Boulevard and W.C. Fields Drive west of Universal Studios Boulevard are private streets and W.C Fields Drive east of Universal Studios Boulevard is a Local Street. The queue length on the eastbound W.C. Fields Drive right-turn approach would increase to approximately eight-car lengths due to the project in the PM Peak Hour. The proposed improvement consists of redesignating the existing eastbound left-turn lane to a shared left-turn/right-turn lane. The resulting lane configuration on the eastbound approach of W.C. Fields Drive would provide one shared left-turn/right-turn lane and one right-turn lane. This improvement would be on the private street of W.C. Fields Drive.

c. Universal Studios Boulevard and US-101 Freeway Southbound On-Ramp:
Universal Studios Boulevard is a private street at the freeway on-ramp. The queue length on the southbound Universal Studios Boulevard left-turn approach would increase to approximately four-car lengths due to the project in the PM Peak Hour. The improvement consists of modifying the traffic signal timing plan to allocate additional green time for the southbound Universal Studios Boulevard left-turn approach. This intersection is under the jurisdiction of Caltrans and any improvement to this intersection is subject to review and approval by Caltrans.

2. Parking Requirements
The proposed project would provide additional parking for 408 vehicles and 73 bicycles. The existing Hilton Universal City currently provides 652 vehicle parking spaces. With the additional parking, the project site would provide a total of 1,060 vehicle parking spaces. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project.

3. Highway Dedication and Street Widening Requirements
Per the Mobility Element of the General Plan, **Universal Hollywood Drive** and **Hotel Drive** are Private Streets.

4. Project Access and Circulation
The conceptual site plan for the project (see **Attachment A**) is acceptable to LADOT. Vehicular access to the project site would continue to be provided via the existing driveway along Universal Hollywood Drive that leads to an internal roadway along the north and west perimeter of the project site. This internal roadway provides vehicle access to the new courtyard adjacent to the Junior Ballroom/Meeting Room Addition, the subterranean parking garage, and the reconfigured drop-off area and turnaround near the Hotel Expansion Building.

5. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update expected in 2020 if applicable. The updated ordinance is expected to be completed prior to the anticipated construction of this project, if approved.

6. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Eileen Hunt of my staff at (213) 972-8481.

Attachments

*K:\Letters\2020\CEN18-46906_555 Universal Hollywood_Hilton Hotel Expansion_TAG.docx*

c: Emma Howard, Council District 4
Bradley Furuya, City Planning
Matthew Masuda, Central District, BOE
Steve Rostam, East Valley District, DOT
Taimour Tanavoli, Case Management Office, DOT
Jason Shender, LLG

**ATTACHMENT A**
**CEN18-46906_555 E Universal Hollywood Dr**




o:\0485\dwg\f2-2.dwg 10/28/2020 16:36:46 jshender llg exhibits color.ctb

NOT TO SCALE

SOURCE: LARGE ARCHITECTURE

# FIGURE 2-2
# PROJECT SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

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

## Project Information

**Project:** Hilton Universal City
**Scenario:** Proposed Project (No TDM)
**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Health Club | 10 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,223 Daily Vehicle Trips |
| 0 Daily VMT | 29,279 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,223 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 29,279 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 22.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

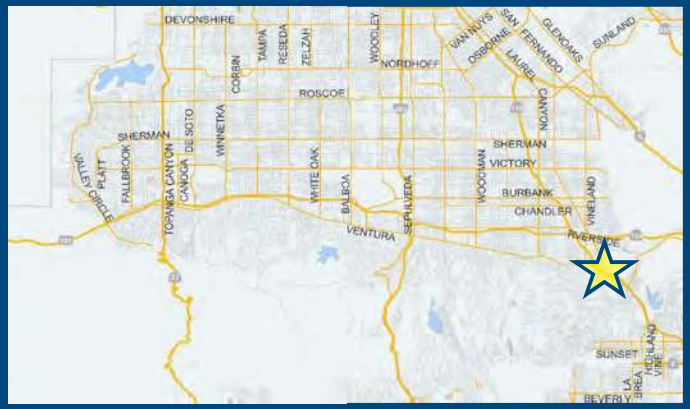
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 10 | ksf |
| Retail \| Quality Restaurant | 12 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,223** Daily Vehicle Trips | **4,223** Daily Vehicle Trips |
| **29,279** Daily VMT | **29,279** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

10/22/2020

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 10.000 | ksf |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 12.000 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 256<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,223** | **Daily Vehicle Trips** | **4,223** | **Daily Vehicle Trips** |
| **29,279** | **Daily VMT** | **29,279** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: October 22, 2020
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 602 | -1.5% | 593 | 8.6 | 5,177 | 5,100 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,060 | -11.0% | 2,724 | 6.4 | 19,584 | 17,434 |
| Non-Home Based Other Attraction | 602 | -1.5% | 593 | 7.1 | 4,274 | 4,210 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 593 | 5,100 | 0.0% | 593 | 5,100 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,724 | 17,434 | 0.0% | 2,724 | 17,434 |
| Non-Home Based Other Attraction | 0.0% | 593 | 4,210 | 0.0% | 593 | 4,210 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 256
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

# ATTACHMENT C
# CEN18-46906_555 E Universal Hollywood Dr

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

28-Oct-20

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 1 | US-101 Freeway Northbound Ramps / Campo de Cahuenga Way (Signalized) | NB Left | AM | 27.1 | C | 277.8 | 27.1 | C | 277.8 | 27.8 | C | 295.3 | 27.8 | C | 295.3 | -- | -- | -- |
| | | | PM | 24.1 | C | 163.0 | 24.1 | C | 163.0 | 24.3 | C | 178.4 | 24.3 | C | 178.4 | -- | -- | -- |
| | | NB Through | AM | 23.8 | C | 147.4 | 23.8 | C | 147.4 | 23.9 | C | 156.9 | 23.9 | C | 156.9 | -- | -- | -- |
| | | | PM | 22.9 | C | 98.4 | 22.9 | C | 98.4 | 23.0 | C | 106.1 | 23.0 | C | 106.1 | -- | -- | -- |
| | | EB Left | AM | 38.0 | D | 98.5 | 38.0 | D | 98.5 | 38.2 | D | 107.1 | 38.2 | D | 107.1 | -- | -- | -- |
| | | | PM | 125.9 | F | 523.4 | 125.9 | F | 523.4 | 156.9 | F | 622.7 | 156.9 | F | 622.7 | -- | -- | -- |
| | | EB Through | AM | 11.4 | B | 117.2 | 11.4 | B | 120.0 | 11.9 | B | 152.7 | 11.9 | B | 155.6 | -- | -- | -- |
| | | | PM | 10.2 | B | 33.0 | 10.2 | B | 36.5 | 10.3 | B | 42.2 | 10.3 | B | 45.7 | -- | -- | -- |
| | | WB Through | AM | 21.3 | C | 44.7 | 21.3 | C | 44.7 | 21.4 | C | 47.6 | 21.4 | C | 47.6 | -- | -- | -- |
| | | | PM | 22.7 | C | 112.4 | 22.7 | C | 112.4 | 24.1 | C | 180.6 | 24.1 | C | 180.6 | -- | -- | -- |
| | | WB Right | AM | 21.7 | C | 47.6 | 21.9 | C | 54.2 | 22.9 | C | 93.6 | 23.1 | C | 100.8 | -- | -- | -- |
| | | | PM | 38.1 | D | 400.5 | 40.2 | F | 421.8 | 74.1 | F | 648.0 | 83.3 | F | 699.8 | -- | -- | -- |
| 2 | MTA Driveway / Campo de Cahuenga Way (Signalized) | NB Left | AM | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | 11.6 | B | 3.4 | -- | -- | -- |
| | | | PM | 11.6 | B | 3.7 | 11.6 | B | 3.7 | 11.6 | B | 4.0 | 11.6 | B | 4.0 | -- | -- | -- |
| | | NB Right | AM | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | 11.6 | B | 2.3 | -- | -- | -- |
| | | | PM | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | 11.6 | B | 1.3 | -- | -- | -- |
| | | SB Left | AM | 11.7 | B | 5.3 | 11.7 | B | 5.3 | 11.7 | B | 5.7 | 11.7 | B | 5.7 | -- | -- | -- |
| | | | PM | 11.7 | B | 6.4 | 11.7 | B | 6.4 | 11.7 | B | 6.8 | 11.7 | B | 6.8 | -- | -- | -- |
| | | SB Right | AM | 11.9 | B | 12.3 | 11.9 | B | 12.3 | 11.9 | B | 13.1 | 11.9 | B | 13.1 | -- | -- | -- |
| | | | PM | 13.0 | B | 58.2 | 13.0 | B | 58.2 | 13.1 | B | 61.6 | 13.1 | B | 61.6 | -- | -- | -- |
| | | EB Left | AM | 6.9 | A | 16.1 | 7.0 | A | 16.2 | 7.4 | A | 18.0 | 7.5 | A | 18.2 | -- | -- | -- |
| | | | PM | 9.7 | A | 11.5 | 9.9 | A | 11.6 | 12.2 | B | 14.8 | 12.4 | B | 15.0 | -- | -- | -- |
| | | EB Through | AM | 6.8 | A | 51.1 | 6.9 | A | 52.3 | 7.2 | A | 67.4 | 7.2 | A | 68.6 | -- | -- | -- |
| | | | PM | 6.0 | A | 12.4 | 6.1 | A | 14.0 | 6.1 | A | 16.4 | 6.1 | A | 18.1 | -- | -- | -- |
| | | EB Right | AM | 7.1 | A | 54.2 | 7.2 | A | 55.5 | 7.6 | A | 71.7 | 7.6 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.1 | A | 13.2 | 6.1 | A | 14.8 | 6.2 | A | 17.3 | 6.2 | A | 19.1 | -- | -- | -- |
| | | WB Left | AM | 7.6 | A | 1.6 | 7.6 | A | 1.7 | 8.2 | A | 1.8 | 8.3 | A | 1.8 | -- | -- | -- |
| | | | PM | 6.2 | A | 1.0 | 6.3 | A | 1.0 | 6.3 | A | 1.0 | 6.4 | A | 1.0 | -- | -- | -- |
| | | WB Through | AM | 6.1 | A | 16.3 | 6.1 | A | 17.5 | 6.3 | A | 25.6 | 6.3 | A | 26.9 | -- | -- | -- |
| | | | PM | 7.5 | A | 82.6 | 7.6 | A | 85.5 | 8.5 | A | 122.8 | 8.6 | A | 126.1 | -- | -- | -- |
| | | WB Right | AM | 6.2 | A | 17.2 | 6.2 | A | 18.7 | 6.4 | A | 27.2 | 6.5 | A | 28.5 | -- | -- | -- |
| | | | PM | 8.0 | A | 88.7 | 8.1 | A | 91.8 | 9.3 | A | 132.9 | 9.4 | A | 136.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 3 | Lankershim Boulevard / Campo de Cahuenga Way - Universal Hollywood Drive (Signalized) | NB Left | AM | 36.2 | D | 43.2 | 36.2 | D | 43.2 | 36.3 | D | 47.1 | 36.3 | D | 47.1 | -- | -- | -- |
| | | | PM | 127.9 | F | 344.5 | 127.9 | F | 344.5 | 144.8 | F | 379.4 | 144.8 | F | 379.4 | -- | -- | -- |
| | | NB Through | AM | 28.3 | C | 318.8 | 28.3 | C | 318.8 | 30.8 | C | 379.9 | 30.8 | C | 379.9 | -- | -- | -- |
| | | | PM | 29.7 | C | 354.1 | 29.7 | C | 354.1 | 31.4 | C | 391.7 | 31.4 | C | 391.7 | -- | -- | -- |
| | | NB Right | AM | 18.1 | B | 186.6 | 18.7 | B | 207.5 | 27.2 | C | 413.0 | 29.2 | C | 448.7 | -- | -- | -- |
| | | | PM | 14.5 | B | 81.0 | 15.3 | B | 116.2 | 17.6 | B | 209.6 | 18.8 | B | 245.4 | -- | -- | -- |
| | | SB Left | AM | 204.3 | F | 763.3 | 221.0 | F | 815.5 | 370.0 | F | 1285.3 | 387.2 | F | 1339.3 | -- | -- | -- |
| | | | PM | 42.6 | D | 84.7 | 44.0 | D | 107.4 | 75.3 | E | 235.8 | 103.2 | F | 296.5 | -- | -- | -- |
| | | SB Through | AM | 30.2 | C | 366.4 | 30.2 | C | 366.4 | 31.7 | C | 397.7 | 31.7 | C | 397.7 | -- | -- | -- |
| | | | PM | 27.1 | C | 282.5 | 27.1 | C | 282.5 | 28.9 | C | 333.8 | 28.9 | C | 333.8 | -- | -- | -- |
| | | SB Right | AM | 22.7 | C | 91.5 | 22.7 | C | 91.5 | 23.5 | C | 119.5 | 23.5 | C | 119.5 | -- | -- | -- |
| | | | PM | 44.8 | D | 477.6 | 44.8 | D | 477.6 | 148.0 | F | 1180.0 | 148.0 | F | 1180.0 | -- | -- | -- |
| | | EB Left | AM | 46.6 | D | 137.3 | 46.6 | D | 137.3 | 56.1 | E | 189.9 | 56.1 | E | 189.9 | -- | -- | -- |
| | | | PM | 40.2 | D | 75.2 | 40.2 | D | 75.2 | 40.5 | D | 88.0 | 40.5 | D | 88.0 | -- | -- | -- |
| | | EB Through | AM | 47.6 | D | 206.6 | 49.2 | D | 216.1 | 69.2 | E | 299.7 | 74.2 | E | 316.9 | -- | -- | -- |
| | | | PM | 34.7 | C | 37.5 | 35.0 | C | 52.5 | 35.1 | D | 60.2 | 35.4 | D | 71.5 | -- | -- | -- |
| | | EB Right | AM | 48.1 | D | 205.6 | 49.8 | D | 215.2 | 70.4 | E | 299.0 | 75.6 | E | 316.4 | -- | -- | -- |
| | | | PM | 35.0 | C | 44.1 | 35.1 | D | 51.1 | 35.3 | D | 58.4 | 35.5 | D | 69.5 | -- | -- | -- |
| | | WB Left | AM | 40.8 | D | 50.5 | 41.0 | D | 56.8 | 82.9 | F | 272.2 | 90.5 | F | 291.1 | -- | -- | -- |
| | | | PM | 47.2 | D | 185.2 | 50.5 | D | 203.8 | 216.0 | F | 671.6 | 236.8 | F | 726.1 | -- | -- | -- |
| | | WB Through | AM | 38.0 | D | 31.9 | 38.1 | D | 39.4 | 38.8 | D | 67.5 | 39.0 | D | 75.4 | -- | -- | -- |
| | | | PM | 40.6 | D | 219.4 | 42.0 | D | 235.5 | 56.4 | E | 328.4 | 64.5 | E | 364.0 | -- | -- | -- |
| | | WB Right | AM | 26.4 | C | 86.1 | 26.7 | C | 99.5 | 28.6 | C | 187.9 | 28.9 | C | 200.2 | -- | -- | -- |
| | | | PM | 84.6 | F | 597.4 | 104.6 | F | 694.6 | 343.8 | F | 1862.4 | 372.7 | F | 2004.6 | -- | -- | -- |
| 4 | Lankershim Boulevard / US-101 Freeway Northbound Off-Ramp (Signalized) | NB Through | AM | 11.1 | B | 97.0 | 11.2 | B | 102.1 | 11.5 | B | 121.7 | 11.6 | B | 127.0 | -- | -- | -- |
| | | | PM | 13.3 | B | 226.2 | 13.5 | B | 234.8 | 14.1 | B | 261.3 | 14.3 | B | 270.3 | -- | -- | -- |
| | | SB Through | AM | 16.8 | B | 375.9 | 16.9 | B | 377.5 | 18.9 | B | 451.3 | 19.0 | B | 453.8 | -- | -- | -- |
| | | | PM | 13.4 | B | 230.0 | 13.5 | B | 232.5 | 14.9 | B | 298.7 | 15.0 | B | 301.5 | -- | -- | -- |
| | | WB Left | AM | 21.4 | C | 50.9 | 21.4 | C | 50.9 | 21.4 | C | 53.9 | 21.4 | C | 53.9 | -- | -- | -- |
| | | | PM | 22.0 | C | 87.3 | 22.0 | C | 87.3 | 22.1 | C | 92.3 | 22.1 | C | 92.3 | -- | -- | -- |
| | | WB Right | AM | 32.6 | C | 344.6 | 33.3 | C | 353.1 | 122.3 | F | 907.9 | 127.8 | F | 939.3 | -- | -- | -- |
| | | | PM | 32.9 | C | 348.1 | 34.1 | C | 362.9 | 54.3 | D | 520.9 | 60.1 | F | 556.9 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 5 | Lankershim Boulevard / Ventura Boulevard - Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.0 | D | 154.5 | 36.0 | D | 154.5 | 37.3 | D | 192.5 | 37.3 | D | 192.5 | -- | -- | -- |
| | | | PM | 42.2 | D | 251.8 | 42.2 | D | 251.8 | 45.5 | D | 280.6 | 45.5 | D | 280.6 | -- | -- | -- |
| | | SB Left | AM | 232.2 | F | 1330.0 | 232.2 | F | 1330.0 | 321.9 | F | 1789.5 | 321.9 | F | 1789.5 | -- | -- | -- |
| | | | PM | 38.6 | D | 294.1 | 38.6 | D | 294.1 | 48.4 | D | 382.4 | 48.4 | D | 382.4 | -- | -- | -- |
| | | SB Through | AM | 59.7 | E | 460.6 | 59.7 | E | 460.6 | 88.9 | F | 617.0 | 88.9 | F | 617.0 | -- | -- | -- |
| | | | PM | 36.7 | D | 275.5 | 36.7 | D | 275.5 | 40.7 | D | 323.1 | 40.7 | D | 323.1 | -- | -- | -- |
| | | SB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | -- | -- | -- |
| | | EB Left | AM | 20.2 | C | 32.6 | 20.2 | C | 32.6 | 20.3 | C | 34.7 | 20.3 | C | 34.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 71.7 | 22.7 | C | 71.7 | 23.2 | C | 77.9 | 23.2 | C | 77.9 | -- | -- | -- |
| | | EB Through | AM | 28.2 | C | 401.8 | 28.2 | C | 401.8 | 29.4 | C | 431.7 | 29.4 | C | 431.7 | -- | -- | -- |
| | | | PM | 22.0 | C | 199.2 | 22.0 | C | 199.2 | 22.3 | C | 210.3 | 22.3 | C | 210.3 | -- | -- | -- |
| | | EB Right | AM | 30.9 | C | 418.5 | 30.9 | C | 418.5 | 32.7 | C | 451.7 | 32.7 | C | 451.7 | -- | -- | -- |
| | | | PM | 22.7 | C | 202.8 | 22.7 | C | 202.8 | 23.0 | C | 214.1 | 23.0 | C | 214.1 | -- | -- | -- |
| | | WB Left | AM | 37.9 | D | 12.8 | 37.9 | D | 12.8 | 40.4 | D | 14.6 | 40.4 | D | 14.6 | -- | -- | -- |
| | | | PM | 31.9 | C | 41.2 | 31.9 | C | 41.2 | 32.3 | C | 43.6 | 32.3 | C | 43.6 | -- | -- | -- |
| | | WB Through | AM | 30.1 | C | 66.0 | 30.1 | C | 66.0 | 30.2 | C | 71.1 | 30.2 | C | 71.1 | -- | -- | -- |
| | | | PM | 38.1 | D | 279.0 | 38.1 | D | 279.0 | 39.5 | D | 300.8 | 39.5 | D | 300.8 | -- | -- | -- |
| | | WB Right | AM | 15.3 | B | 122.9 | 15.6 | B | 135.8 | 16.2 | B | 159.8 | 16.5 | D | 173.7 | -- | -- | -- |
| | | | PM | 24.0 | C | 381.2 | 25.3 | C | 409.5 | 28.9 | C | 476.8 | 31.2 | C | 514.6 | -- | -- | -- |
| 6 | US-101 Freeway Southbound Ramps - Regal Place / Cahuenga Boulevard (Signalized) | NB Left/Through Right | AM | 36.1 | D | 69.6 | 36.1 | D | 69.6 | 36.2 | D | 75.4 | 36.2 | D | 75.4 | -- | -- | -- |
| | | | PM | 35.9 | D | 60.4 | 35.9 | D | 60.4 | 36.0 | D | 66.2 | 36.0 | D | 66.2 | -- | -- | -- |
| | | SB Left | AM | 61.1 | E | 380.6 | 61.1 | E | 380.6 | 70.5 | E | 434.1 | 70.5 | E | 434.1 | -- | -- | -- |
| | | | PM | 47.0 | D | 258.3 | 47.0 | D | 258.3 | 44.8 | D | 224.6 | 44.8 | D | 224.6 | -- | -- | -- |
| | | SB Through | AM | 43.1 | D | 184.5 | 43.1 | D | 184.5 | 43.5 | D | 197.8 | 43.5 | D | 197.8 | -- | -- | -- |
| | | | PM | 42.1 | D | 149.9 | 42.1 | D | 149.9 | 41.7 | D | 133.4 | 41.7 | D | 133.4 | -- | -- | -- |
| | | SB Right | AM | 28.2 | C | 205.5 | 28.6 | C | 221.5 | 29.0 | C | 233.3 | 29.4 | C | 250.0 | -- | -- | -- |
| | | | PM | 28.6 | C | 219.7 | 29.3 | C | 245.4 | 28.9 | C | 230.6 | 29.6 | C | 256.5 | -- | -- | -- |
| | | EB Left | AM | 27.6 | C | 212.5 | 27.6 | C | 212.5 | 28.9 | C | 233.2 | 28.9 | C | 233.2 | -- | -- | -- |
| | | | PM | 30.9 | C | 211.8 | 30.9 | C | 211.8 | 34.3 | C | 251.4 | 34.3 | C | 251.4 | -- | -- | -- |
| | | EB Through | AM | 64.6 | E | 913.8 | 64.6 | E | 913.8 | 95.0 | F | 1186.0 | 95.0 | F | 1186.0 | -- | -- | -- |
| | | | PM | 29.5 | C | 367.6 | 29.5 | C | 367.6 | 30.7 | C | 401.6 | 30.7 | C | 401.6 | -- | -- | -- |
| | | EB Right | AM | 64.9 | E | 914.4 | 64.9 | E | 914.4 | 95.7 | F | 1188.9 | 95.7 | F | 1188.9 | -- | -- | -- |
| | | | PM | 29.5 | C | 365.9 | 29.5 | C | 365.9 | 30.7 | C | 399.7 | 30.7 | C | 399.7 | -- | -- | -- |
| | | WB Left | AM | 68.4 | E | 26.2 | 68.4 | E | 26.2 | 71.0 | E | 30.7 | 71.0 | E | 30.7 | -- | -- | -- |
| | | | PM | 40.6 | D | 26.5 | 40.6 | D | 26.5 | 41.1 | D | 29.3 | 41.1 | D | 29.3 | -- | -- | -- |
| | | WB Through | AM | 45.9 | D | 238.6 | 45.9 | D | 238.6 | 47.4 | D | 263.6 | 47.4 | D | 263.6 | -- | -- | -- |
| | | | PM | 174.9 | F | 887.9 | 174.9 | F | 887.9 | 244.2 | F | 1170.4 | 244.2 | F | 1170.4 | -- | -- | -- |
| | | WB Right | AM | 21.8 | C | 18.2 | 21.8 | C | 18.2 | 21.8 | C | 19.0 | 21.8 | C | 19.0 | -- | -- | -- |
| | | | PM | 22.9 | C | 67.0 | 22.9 | C | 67.0 | 23.0 | C | 70.7 | 23.0 | C | 70.7 | -- | -- | -- |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 7 | Universal Hollywood Drive / Hilton Driveway (Unsignalized) | NB Left | AM | 9.0 | A | 2.5 | 9.4 | A | 5.0 | 11.5 | B | 5.0 | 12.4 | B | 10.0 | -- | -- | -- |
| | | | PM | 8.1 | A | 2.5 | 8.6 | A | 7.5 | 9.3 | A | 5.0 | 10.2 | B | 10.0 | -- | -- | -- |
| | | EB Left | AM | 13.7 | B | 10.0 | 15.4 | C | 22.5 | 24.3 | C | 25.0 | 31.4 | D | 52.5 | -- | -- | -- |
| | | | PM | 11.4 | B | 5.0 | 13.9 | B | 22.5 | 15.8 | C | 10.0 | 22.4 | C | 45.0 | -- | -- | -- |
| | | EB Right | AM | 10.5 | B | 2.5 | 11.1 | B | 7.5 | 13.4 | B | 5.0 | 14.5 | B | 10.0 | -- | -- | -- |
| | | | PM | 9.4 | A | 2.5 | 10.3 | B | 10.0 | 11.0 | B | 5.0 | 12.3 | B | 12.5 | -- | -- | -- |
| 8 | Universal Studios Boulevard / W.C. Fields Drive (Signalized) | NB Left | AM | 18.9 | B | 19.9 | 19.0 | B | 22.8 | 19.6 | B | 21.2 | 19.7 | B | 24.2 | 19.7 | B | 24.2 |
| | | | PM | 23.4 | C | 5.9 | 23.9 | C | 11.1 | 28.0 | C | 6.8 | 29.1 | C | 13.0 | 29.1 | C | 13.0 |
| | | NB Through | AM | 18.3 | B | 82.2 | 18.3 | B | 82.2 | 18.7 | B | 105.1 | 18.7 | B | 105.1 | 18.7 | B | 105.1 |
| | | | PM | 17.5 | B | 42.3 | 17.5 | B | 42.3 | 17.1 | B | 21.5 | 17.1 | B | 21.5 | 17.1 | B | 21.5 |
| | | NB Right | AM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | | PM | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- | 0.0 | A | -- |
| | | SB Through | AM | 17.4 | B | 44.0 | 17.4 | B | 44.0 | 17.7 | B | 60.2 | 17.7 | B | 60.2 | 17.7 | B | 60.2 |
| | | | PM | 19.9 | B | 183.0 | 19.9 | B | 183.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 | 22.1 | C | 269.0 |
| | | SB Right | AM | 17.7 | B | 44.8 | 17.7 | B | 44.8 | 18.1 | B | 61.3 | 18.1 | B | 61.3 | 18.1 | B | 61.3 |
| | | | PM | 21.0 | C | 182.8 | 21.0 | C | 182.8 | 24.1 | C | 272.5 | 24.1 | C | 272.5 | 24.1 | C | 272.5 |
| | | EB Left | AM | 34.3 | C | 89.6 | 34.3 | C | 89.6 | 34.4 | C | 94.6 | 34.4 | C | 94.6 | 37.8 | D | 139.0 |
| | | | PM | 33.0 | C | 47.9 | 33.0 | C | 47.9 | 33.1 | C | 50.7 | 33.1 | C | 50.7 | 46.2 | D | 201.4 |
| | | EB Right | AM | 34.1 | C | 72.3 | 35.0 | D | 97.0 | 34.2 | C | 76.4 | 35.2 | C | 101.2 | 33.8 | C | 65.7 |
| | | | PM | 145.6 | F | 516.2 | 214.8 | F | 715.9 | 167.2 | F | 578.3 | 238.7 | F | 785.1 | 76.4 | E | 313.6 |
| | | WB Left | AM | 26.4 | C | 112.0 | 26.4 | C | 112.0 | 26.6 | C | 118.3 | 26.6 | C | 118.3 | 26.6 | C | 118.3 |
| | | | PM | 27.5 | C | 158.5 | 27.5 | C | 158.5 | 27.8 | C | 167.9 | 27.8 | C | 167.9 | 27.8 | C | 167.9 |
| | | WB Through | AM | 29.8 | C | 229.7 | 30.7 | C | 247.0 | 30.6 | C | 245.4 | 31.7 | C | 263.3 | 31.7 | C | 263.3 |
| | | | PM | 25.2 | C | 63.1 | 25.7 | C | 86.5 | 25.3 | C | 67.0 | 25.8 | C | 90.9 | 25.8 | C | 90.9 |
| | | WB Right | AM | 31.8 | C | 228.3 | 31.8 | C | 228.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 | 42.6 | D | 320.3 |
| | | | PM | 25.0 | C | 42.7 | 25.0 | C | 42.7 | 24.3 | C | 14.1 | 24.3 | C | 14.1 | 24.3 | C | 14.1 |
| 9 | Universal Studios Boulevard / US-101 Freeway Southbound On-Ramp (Signalized) | NB Through | AM | 5.7 | A | 37.4 | 5.7 | A | 37.9 | 5.8 | A | 44.1 | 5.8 | A | 44.4 | 8.4 | A | 59.0 |
| | | | PM | 5.5 | A | 28.6 | 5.5 | A | 29.0 | 5.5 | A | 24.5 | 5.5 | A | 24.9 | 7.9 | A | 33.2 |
| | | NB Right | AM | 5.9 | A | 37.4 | 5.9 | A | 37.9 | 6.1 | A | 44.0 | 6.1 | A | 44.3 | 8.8 | A | 58.4 |
| | | | PM | 5.7 | A | 29.2 | 5.7 | A | 29.7 | 5.6 | A | 24.9 | 5.6 | A | 25.4 | 8.1 | A | 33.6 |
| | | SB Left | AM | 18.0 | B | 58.4 | 18.2 | B | 64.9 | 18.5 | B | 78.4 | 18.7 | B | 85.2 | 14.7 | B | 72.8 |
| | | | PM | 40.6 | D | 303.1 | 50.2 | D | 353.4 | 193.1 | F | 1059.1 | 215.0 | F | 1170.1 | 71.1 | F | 594.9 |
| | | SB Through | AM | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.5 | 0.2 | A | 0.6 | 0.2 | A | 0.6 |
| | | | PM | 0.3 | A | 1.2 | 0.3 | A | 1.3 | 0.3 | A | 1.8 | 0.3 | A | 1.8 | 0.3 | A | 1.8 |

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

| NO. | INTERSECTION | TRAFFIC MOVEMENT | PEAK HOUR | YEAR 2020 EXISTING | | | YEAR 2020 EXISTING W/ PROJECT | | | YEAR 2025 FUTURE W/O PROJECT | | | YEAR 2025 FUTURE W/ PROJECT | | | YEAR 2025 FUTURE W/ PROJECT + IMPROVEMENTS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] | DELAY [2] | LOS [3] | QUEUE [4] |
| 10 | Universal Studios Boulevard / Cahuenga Boulevard West (Signalized) | SB Left | AM | 21.0 | C | 50.4 | 21.1 | C | 55.2 | 21.2 | C | 64.0 | 21.3 | C | 69.0 | -- | -- | -- |
| | | | PM | 22.7 | C | 153.7 | 22.9 | C | 163.8 | 24.5 | C | 241.9 | 24.7 | C | 250.7 | -- | -- | -- |
| | | SB Right | AM | 11.3 | B | 42.4 | 11.3 | B | 42.4 | 11.3 | B | 45.2 | 11.3 | B | 45.2 | -- | -- | -- |
| | | | PM | 12.1 | B | 89.4 | 12.1 | B | 89.4 | 12.1 | B | 95.3 | 12.1 | B | 95.3 | -- | -- | -- |
| | | EB Left | AM | 51.0 | D | 234.1 | 51.0 | D | 234.1 | 53.5 | D | 258.4 | 53.5 | D | 258.4 | -- | -- | -- |
| | | | PM | 45.3 | D | 111.8 | 45.3 | D | 111.8 | 44.4 | D | 76.8 | 44.4 | D | 76.8 | -- | -- | -- |
| | | EB Through | AM | 34.1 | C | 716.8 | 34.1 | C | 716.8 | 46.2 | D | 900.3 | 46.2 | D | 900.3 | -- | -- | -- |
| | | | PM | 22.3 | C | 372.4 | 22.3 | C | 372.4 | 23.3 | C | 408.7 | 23.3 | C | 408.7 | -- | -- | -- |
| | | WB Through | AM | 34.8 | C | 192.1 | 34.8 | C | 192.1 | 35.4 | D | 212.8 | 35.4 | D | 212.8 | -- | -- | -- |
| | | | PM | 38.5 | D | 299.8 | 38.5 | D | 299.8 | 40.9 | D | 354.4 | 40.9 | D | 354.4 | -- | -- | -- |
| | | WB Right | AM | 5.9 | A | 53.9 | 5.9 | A | 55.5 | 6.2 | A | 71.6 | 6.2 | A | 73.4 | -- | -- | -- |
| | | | PM | 6.3 | A | 81.0 | 6.4 | A | 83.7 | 6.3 | A | 82.5 | 6.4 | A | 85.2 | -- | -- | -- |
| 11 | Barham Boulevard / W.C. Fields Drive - Cahuenga Boulevard East (Signalized) | NB Through | AM | 18.6 | B | 236.6 | 18.7 | B | 239.6 | 19.1 | B | 254.1 | 19.2 | B | 257.2 | -- | -- | -- |
| | | | PM | 17.7 | B | 201.4 | 17.8 | B | 206.0 | 18.3 | B | 226.7 | 18.5 | B | 231.5 | -- | -- | -- |
| | | SB Through | AM | 34.5 | C | 563.5 | 34.5 | C | 563.5 | 46.4 | F | 675.9 | 46.4 | F | 675.9 | -- | -- | -- |
| | | | PM | 26.5 | C | 452.1 | 26.5 | C | 452.1 | 29.7 | C | 503.9 | 29.7 | C | 503.9 | -- | -- | -- |
| | | SB Right | AM | 17.2 | B | 120.7 | 17.5 | B | 130.1 | 18.6 | B | 167.8 | 19.0 | B | 178.5 | -- | -- | -- |
| | | | PM | 17.2 | B | 122.0 | 17.7 | B | 137.7 | 16.8 | B | 107.1 | 17.2 | B | 122.0 | -- | -- | -- |
| | | WB Left/Through | AM | 16.6 | B | 167.5 | 16.7 | B | 171.1 | 16.9 | B | 179.3 | 16.9 | B | 183.0 | -- | -- | -- |
| | | | PM | 22.2 | C | 353.2 | 22.5 | C | 360.3 | 23.4 | C | 381.1 | 23.8 | C | 388.3 | -- | -- | -- |
| | | WB Right | AM | 222.2 | F | 1805.5 | 222.2 | F | 1805.5 | 249.3 | F | 2007.8 | 249.3 | F | 2007.8 | -- | -- | -- |
| | | | PM | 211.0 | F | 1722.2 | 211.0 | F | 1722.2 | 265.2 | F | 2126.9 | 265.2 | F | 2126.9 | -- | -- | -- |

[1] Pursuant to *LADOT Transportation Assessment Guidelines,* July 2020, the Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections was utilized to calculate vehicle queuing.

[2] Control delay reported in seconds per vehicle.

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-20 | B |
| > 20-35 | C |
| > 35-55 | D |
| > 55-80 | E |
| > 80 | F |

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

| Control Delay (s/veh) | LOS |
|---|---|
| <= 10 | A |
| > 10-15 | B |
| > 15-25 | C |
| > 25-35 | D |
| > 35-50 | E |
| > 50 | F |

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




NOT TO SCALE

SOURCE: ANKROM MOISAN ARCHITECTS, INC.

# FIGURE 2
# PROJECT CONCEPTUAL SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

HILTON UNIVERSAL CITY PROJECT

u:\0593\dwg\figure 2 (project site plan).dwg 09/19/2022 13:40:33 jshender llg bw standard-color.ctb

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

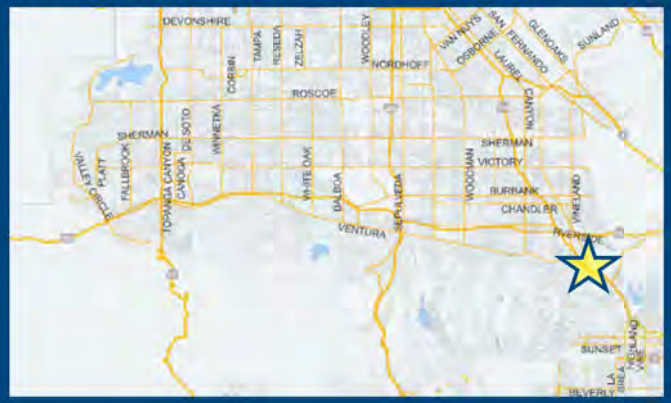
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| Quality Restaurant | 5.95 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,421 Daily Vehicle Trips |
| 0 Daily VMT | 30,688 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,421 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 30,688 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 21.570 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

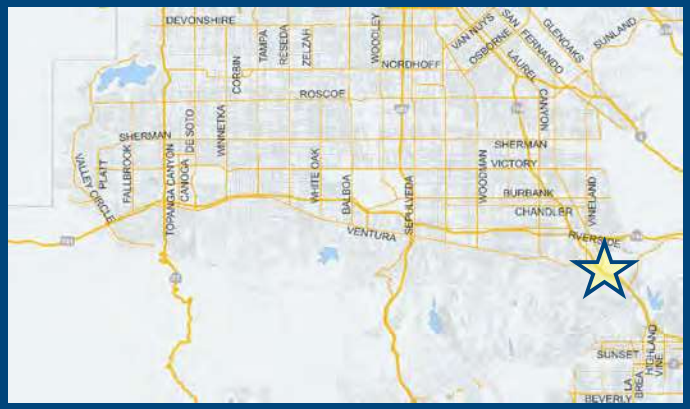
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No PDFs)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 9.57 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 6.05 | ksf |
| Retail \| Quality Restaurant | 5.95 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply** ☐ Proposed Prj ☐ Mitigation
- 100 city code parking provision for the project site
- 74 actual parking provision for the project site

**Unbundle Parking** ☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

**Parking Cash-Out** ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

**Price Workplace Parking** ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

**Residential Area Parking Permits** ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,421** Daily Vehicle Trips | **4,421** Daily Vehicle Trips |
| **30,688** Daily VMT | **30,688** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **9.9** Work VMT per Employee | **9.9** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

8/3/2022

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 9.570 | ksf |
| | High-Turnover Sit-Down Restaurant | 6.050 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 5.950 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 255<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **4,421** | **Daily Vehicle Trips** | **4,421** | **Daily Vehicle Trips** |
| **30,688** | **Daily VMT** | **30,688** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **9.9** | **Work VMT per Employee** | **9.9** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 3: TDM Outputs

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

### TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: August 3, 2022
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No PDFs)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 652 | -1.5% | 642 | 8.6 | 5,607 | 5,521 |
| Home-Based Work Attraction | 370 | -15.4% | 313 | 8.1 | 2,997 | 2,535 |
| Home-Based Other Attraction | 3,173 | -11.0% | 2,824 | 6.4 | 20,307 | 18,074 |
| Non-Home Based Other Attraction | 652 | -1.5% | 642 | 7.1 | 4,629 | 4,558 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 642 | 5,521 | 0.0% | 642 | 5,521 |
| Home-Based Work Attraction | 0.0% | 313 | 2,535 | 0.0% | 313 | 2,535 |
| Home-Based Other Attraction | 0.0% | 2,824 | 18,074 | 0.0% | 2,824 | 18,074 |
| Non-Home Based Other Attraction | 0.0% | 642 | 4,558 | 0.0% | 642 | 4,558 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 255
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,535** | **2,535** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **9.9** | **9.9** |

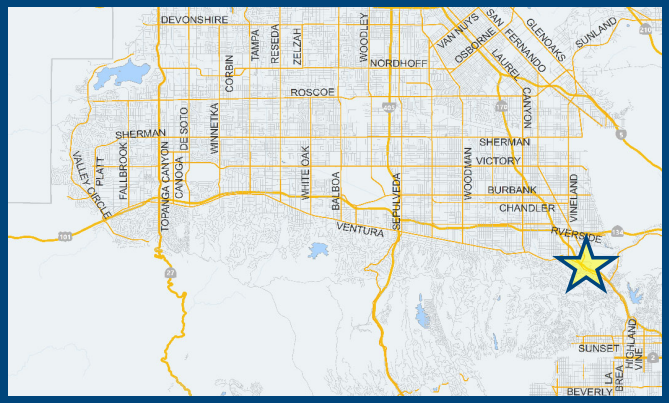
**ATTACHMENT A2**
**CEN23-55316_555 E Universal Hollywood Dr**

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

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

## Project Information

**Project:** Hilton Universal City
**Scenario:** Proposed Project (No TDM)
**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 4,902 Daily Vehicle Trips |
| 0 Daily VMT | 34,132 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 4,902 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 34,132 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 23.807 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

*3/28/2023*

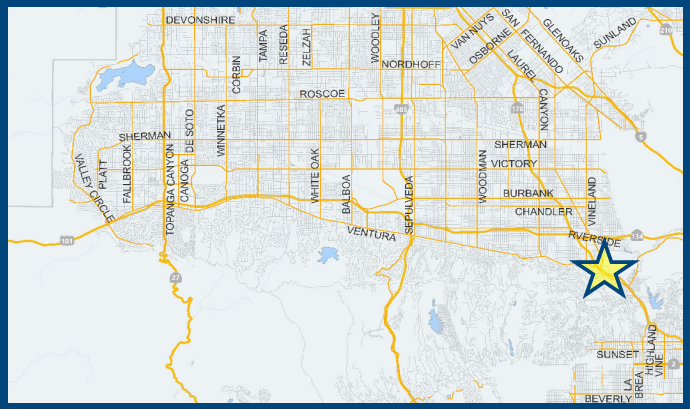
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Proposed Project (No TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Hotel | 395 | Rooms |
| Retail \| Health Club | 8.63 | ksf |
| Retail \| High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| Retail \| Quality Restaurant | 7.232 | ksf |
| (custom) Bar/Lounge \| Retail/Non-Retail | Retail | LU type |
| (custom) Bar/Lounge \| Residents | 0 | Person |
| (custom) Bar/Lounge \| Employees | 6 | Person |
| (custom) Bar/Lounge \| Daily | 194 | Trips |
| (custom) Bar/Lounge \| HBW-Attraction Split | 6 | Percent |
| (custom) Bar/Lounge \| HBO-Attraction Split | 50 | Percent |
| (custom) Bar/Lounge \| NHB-Attraction Split | 22 | Percent |
| (custom) Bar/Lounge \| HBW-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| HBO-Production Split | 0 | Percent |
| (custom) Bar/Lounge \| NHB-Production Split | 22 | Percent |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **4,902** Daily Vehicle Trips | **4,902** Daily Vehicle Trips |
| **34,132** Daily VMT | **34,132** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **10.0** Work VMT per Employee | **10.0** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

3/28/2023

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| **Housing** | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | Hotel | 395 | Rooms |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| **Retail** | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | Health Club | 8.630 | ksf |
| | High-Turnover Sit-Down Restaurant | 7.945 | ksf |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | Quality Restaurant | 7.232 | ksf |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| *Office* | *General Office* | *0.000* | *ksf* |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| **Other** | Bar/Lounge | 194 | Trips |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

## Analysis Results

Total Employees: 273
Total Population: 0

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **4,902** | **Daily Vehicle Trips** | **4,902** | **Daily Vehicle Trips** |
| **34,132** | **Daily VMT** | **34,132** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **10** | **Work VMT per Employee** | **10** | **Work VMT per Employee** |

## Significant VMT Impact?

### APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

| *Proposed Project* | | *With Mitigation* | |
|---|---|---|---|
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

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

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Commute Trip Reductions** | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| **Shared Mobility** | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

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

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

## Final Combined & Maximum TDM Effect

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

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: March 28, 2023
Project Name: Hilton Universal City
Project Scenario: Proposed Project (No TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 766 | -1.6% | 754 | 8.6 | 6,588 | 6,484 |
| Home-Based Work Attraction | 399 | -15.5% | 337 | 8.1 | 3,232 | 2,730 |
| Home-Based Other Attraction | 3,435 | -11.0% | 3,057 | 6.4 | 21,984 | 19,565 |
| Non-Home Based Other Attraction | 766 | -1.6% | 754 | 7.1 | 5,439 | 5,353 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Home Based Other Production | 0.0% | 0 | 0 | 0.0% | 0 | 0 |
| Non-Home Based Other Production | 0.0% | 754 | 6,484 | 0.0% | 754 | 6,484 |
| Home-Based Work Attraction | 0.0% | 337 | 2,730 | 0.0% | 337 | 2,730 |
| Home-Based Other Attraction | 0.0% | 3,057 | 19,565 | 0.0% | 3,057 | 19,565 |
| Non-Home Based Other Attraction | 0.0% | 754 | 5,353 | 0.0% | 754 | 5,353 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 273
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **2,730** | **2,730** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **10.0** | **10.0** |

# K-5 Alternative 3 VMT Calculator Results with TDM

# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

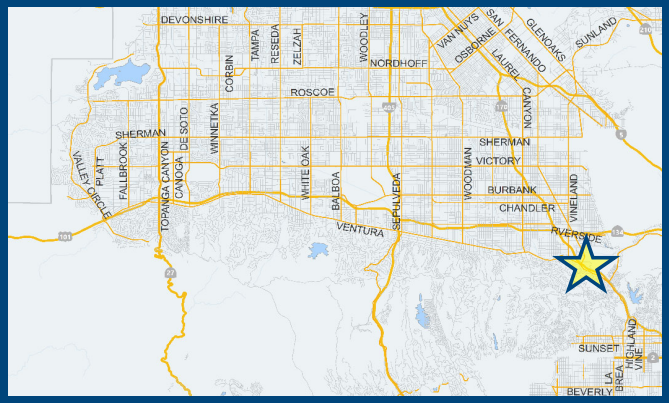
*Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?*

## Project Information

**Project:** Hilton Universal City

**Scenario:** Alternative 3 (with TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




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

○ Yes ○ No

## Existing Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Housing \| Single Family | | DU |

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

## Proposed Project Land Use

| Land Use Type | Value | Unit |
|---|---|---|
| Office \| General Office | 105 | ksf |
| Office \| General Office | 105 | ksf |

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

## Project Screening Summary

| Existing Land Use | Proposed Project |
|---|---|
| 0 Daily Vehicle Trips | 1,029 Daily Vehicle Trips |
| 0 Daily VMT | 7,854 Daily VMT |

### Tier 1 Screening Criteria

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

### Tier 2 Screening Criteria

| | |
|---|---|
| The net increase in daily trips < 250 trips | 1,029 Net Daily Trips |
| The net increase in daily VMT ≤ 0 | 7,854 Net Daily VMT |
| The proposed project consists of only retail land uses ≤ 50,000 square feet total. | 0.000 ksf |

**The proposed project is required to perform VMT analysis.**

Measuring the Miles

7/11/2023

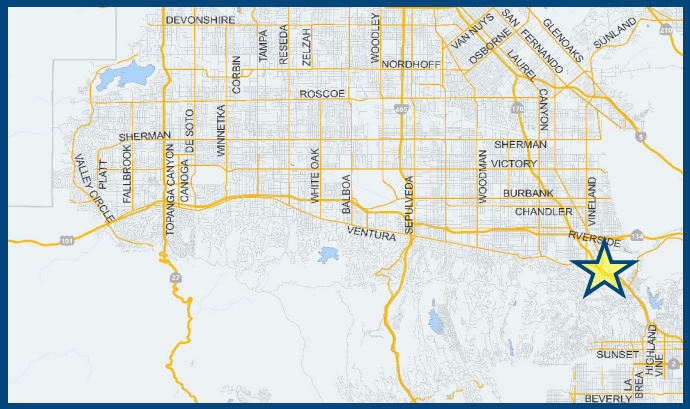
# CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

## Project Information

**Project:** Hilton Universal City

**Scenario:** Alternative 3 (with TDM)

**Address:** 555 E UNIVERSAL HOLLYWOOD DR, 91608




| Proposed Project Land Use Type | Value | Unit |
|---|---|---|
| Office \| General Office | 105 | ksf |

## TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

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

### A Parking

**Reduce Parking Supply**
☐ Proposed Prj ☐ Mitigation
100 city code parking provision for the project site
74 actual parking provision for the project site

**Unbundle Parking**
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

**Parking Cash-Out**
☐ Proposed Prj ☐ Mitigation
50 percent of employees eligible

**Price Workplace Parking**
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

**Residential Area Parking Permits**
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

### B Transit

### C Education & Encouragement

### D Commute Trip Reductions

### E Shared Mobility

### F Bicycle Infrastructure

### G Neighborhood Enhancement

## Analysis Results

| Proposed Project | With Mitigation |
|---|---|
| **905** Daily Vehicle Trips | **905** Daily Vehicle Trips |
| **6,902** Daily VMT | **6,902** Daily VMT |
| **0.0** Household VMT per Capita | **0.0** Household VMT per Capita |
| **8.7** Work VMT per Employee | **8.7** Work VMT per Employee |

### Significant VMT Impact?

| Proposed Project | With Mitigation |
|---|---|
| **Household: No** Threshold = 9.4 15% Below APC | **Household: No** Threshold = 9.4 15% Below APC |
| **Work: No** Threshold = 11.6 15% Below APC | **Work: No** Threshold = 11.6 15% Below APC |

Measuring the Miles

7/11/2023

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 11, 2023
Project Name: Hilton Universal City
Project Scenario: Alternative 3 (with TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916(

*Version 1.3*

| Project Information | | | |
|---|---|---|---|
| **Land Use Type** | | **Value** | **Units** |
| *Housing* | *Single Family* | *0* | *DU* |
| | *Multi Family* | *0* | *DU* |
| | *Townhouse* | *0* | *DU* |
| | *Hotel* | *0* | *Rooms* |
| | *Motel* | *0* | *Rooms* |
| *Affordable Housing* | *Family* | *0* | *DU* |
| | *Senior* | *0* | *DU* |
| | *Special Needs* | *0* | *DU* |
| | *Permanent Supportive* | *0* | *DU* |
| *Retail* | *General Retail* | *0.000* | *ksf* |
| | *Furniture Store* | *0.000* | *ksf* |
| | *Pharmacy/Drugstore* | *0.000* | *ksf* |
| | *Supermarket* | *0.000* | *ksf* |
| | *Bank* | *0.000* | *ksf* |
| | *Health Club* | *0.000* | *ksf* |
| | *High-Turnover Sit-Down Restaurant* | *0.000* | *ksf* |
| | *Fast-Food Restaurant* | *0.000* | *ksf* |
| | *Quality Restaurant* | *0.000* | *ksf* |
| | *Auto Repair* | *0.000* | *ksf* |
| | *Home Improvement* | *0.000* | *ksf* |
| | *Free-Standing Discount* | *0.000* | *ksf* |
| | *Movie Theater* | *0* | *Seats* |
| **Office** | General Office | 105.000 | ksf |
| | *Medical Office* | *0.000* | *ksf* |
| *Industrial* | *Light Industrial* | *0.000* | *ksf* |
| | *Manufacturing* | *0.000* | *ksf* |
| | *Warehousing/Self-Storage* | *0.000* | *ksf* |
| *School* | *University* | *0* | *Students* |
| | *High School* | *0* | *Students* |
| | *Middle School* | *0* | *Students* |
| | *Elementary* | *0* | *Students* |
| | *Private School (K-12)* | *0* | *Students* |
| *Other* | | *0* | *Trips* |

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 1: Project & Analysis Overview

Date: July 11, 2023
Project Name: Hilton Universal City
Project Scenario: Alternative 3 (with TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916( *Version 1.3*

| Analysis Results | | | |
|---|---|---|---|
| Total Employees: 420<br>Total Population: 0 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **905** | **Daily Vehicle Trips** | **905** | **Daily Vehicle Trips** |
| **6,902** | **Daily VMT** | **6,902** | **Daily VMT** |
| **0** | **Household VMT per Capita** | **0** | **Household VMT per Capita** |
| **8.7** | **Work VMT per Employee** | **8.7** | **Work VMT per Employee** |

| Significant VMT Impact? | | | |
|---|---|---|---|
| **APC: South Valley** | | | |
| Impact Threshold: 15% Below APC Average<br>Household = 9.4<br>Work = 11.6 | | | |
| ***Proposed Project*** | | ***With Mitigation*** | |
| **VMT Threshold** | **Impact** | **VMT Threshold** | **Impact** |
| Household > 9.4 | No | Household > 9.4 | No |
| Work > 11.6 | No | Work > 11.6 | No |

## TDM Strategy Inputs

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Parking** | *Reduce parking supply* | *City code parking provision (spaces)* | *0* | *0* |
| | | *Actual parking provision (spaces)* | *0* | *0* |
| | *Unbundle parking* | *Monthly cost for parking ($)* | *$0* | *$0* |
| | *Parking cash-out* | *Employees eligible (%)* | *0%* | *0%* |
| | *Price workplace parking* | *Daily parking charge ($)* | *$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)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| **Transit** | *Reduce transit headways* | *Reduction in headways (increase in frequency) (%)* | *0%* | *0%* |
| | | *Existing transit mode share (as a percent of total daily trips) (%)* | *0%* | *0%* |
| | | *Lines within project site improved (<50%, >=50%)* | *0* | *0* |
| | *Implement neighborhood shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees and residents eligible (%)* | *0%* | *0%* |
| | Transit subsidies | Employees and residents eligible (%) | 100% | 100% |
| | | Amount of transit subsidy per passenger (daily equivalent) ($) | $1.49 | $1.49 |
| **Education & Encouragement** | *Voluntary travel behavior change program* | *Employees and residents participating (%)* | *0%* | *0%* |
| | Promotions and marketing | Employees and residents participating (%) | 100% | 100% |

(cont. on following page)

## TDM Strategy Inputs, Cont.

| Strategy Type | | Description | Proposed Project | Mitigations |
|---|---|---|---|---|
| Commute Trip Reductions | *Required commute trip reduction program* | *Employees participating (%)* | *0%* | *0%* |
| | *Alternative Work Schedules and Telecommute* | *Employees participating (%)* | *0%* | *0%* |
| | | *Type of program* | *0* | *0* |
| | *Employer sponsored vanpool or shuttle* | *Degree of implementation (low, medium, high)* | *0* | *0* |
| | | *Employees eligible (%)* | *0%* | *0%* |
| | | *Employer size (small, medium, large)* | *0* | *0* |
| | *Ride-share program* | *Employees eligible (%)* | *0%* | *0%* |
| Shared Mobility | *Car share* | *Car share project setting (Urban, Suburban, All Other)* | *0* | *0* |
| | *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.

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

# CITY OF LOS ANGELES VMT CALCULATOR

**Report 3: TDM Outputs**

Date: July 11, 2023
Project Name: Hilton Universal City
Project Scenario: Alternative 3 (with TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 91608

*Version 1.3*

## TDM Adjustments by Trip Purpose & Strategy

**Place type: Suburban Center**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Parking** | Reduce parking supply | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Parking sections 1 - 5 |
| | Unbundle parking | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Parking cash-out | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Price workplace parking | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Residential area parking permits | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | *0.00%* | |
| **Transit** | Reduce transit headways | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Transit sections 1 - 3 |
| | Implement neighborhood shuttle | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Transit subsidies | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | 7% | |
| **Education & Encouragement** | Voluntary travel behavior change program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Education & Encouragement sections 1 - 2 |
| | Promotions and marketing | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | *0%* | |
| **Commute Trip Reductions** | Required commute trip reduction program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4 |
| | Alternative Work Schedules and Telecommute Program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Employer sponsored vanpool or shuttle | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| | Ride-share program | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | *0%* | |
| **Shared Mobility** | Car-share | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Shared Mobility sections 1 - 3 |
| | 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%* | |
| | 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**

| | | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | | *Source* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | |
| **Bicycle Infrastructure** | Implement/ Improve on-street bicycle facility | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3 |
| | Include Bike parking per LAMC | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | Include secure bike parking and showers | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| **Neighborhood Enhancement** | Traffic calming improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2 |
| | Pedestrian network improvements | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | *0.0%* | |

## Final Combined & Maximum TDM Effect

| | *Home Based Work Production* | | *Home Based Work Attraction* | | *Home Based Other Production* | | *Home Based Other Attraction* | | *Non-Home Based Other Production* | | *Non-Home Based Other Attraction* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated | Proposed | Mitigated |
| **COMBINED TOTAL** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *8%* |
| **MAX. TDM EFFECT** | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* | *12%* |

***= Minimum (X%, 1-[(1-A)*(1-B)…])***

*where X%=*

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

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

# CITY OF LOS ANGELES VMT CALCULATOR

## Report 4: MXD Methodology

Date: July 11, 2023
Project Name: Hilton Universal City
Project Scenario: Alternative 3 (with TDM)
Project Address: 555 E UNIVERSAL HOLLYWOOD DR, 916

*Version 1.3*

### MXD Methodology - Project Without TDM

| | Unadjusted Trips | MXD Adjustment | MXD Trips | Average Trip Length | Unadjusted VMT | MXD VMT |
|---|---|---|---|---|---|---|
| Home Based Work Production | 0 | 0.0% | 0 | 10.4 | 0 | 0 |
| Home Based Other Production | 0 | 0.0% | 0 | 6.3 | 0 | 0 |
| Non-Home Based Other Production | 137 | -1.5% | 135 | 8.6 | 1,178 | 1,161 |
| Home-Based Work Attraction | 609 | -15.4% | 515 | 8.1 | 4,933 | 4,172 |
| Home-Based Other Attraction | 275 | -11.3% | 244 | 6.4 | 1,760 | 1,562 |
| Non-Home Based Other Attraction | 137 | -1.5% | 135 | 7.1 | 973 | 959 |

### MXD Methodology with TDM Measures

| | *Proposed Project* | | | *Project with Mitigation Measures* | | |
|---|---|---|---|---|---|---|
| | TDM Adjustment | Project Trips | Project VMT | TDM Adjustment | Mitigated Trips | Mitigated VMT |
| Home Based Work Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Home Based Other Production | -12.1% | 0 | 0 | -12.1% | 0 | 0 |
| Non-Home Based Other Production | -12.1% | 119 | 1,020 | -12.1% | 119 | 1,020 |
| Home-Based Work Attraction | -12.1% | 453 | 3,666 | -12.1% | 453 | 3,666 |
| Home-Based Other Attraction | -12.1% | 214 | 1,373 | -12.1% | 214 | 1,373 |
| Non-Home Based Other Attraction | -12.1% | 119 | 843 | -12.1% | 119 | 843 |

### MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 420
APC: South Valley

| | *Proposed Project* | *Project with Mitigation Measures* |
|---|---|---|
| *Total Home Based Production VMT* | **0** | **0** |
| *Total Home Based Work Attraction VMT* | **3,666** | **3,666** |
| *Total Home Based VMT Per Capita* | **0.0** | **0.0** |
| *Total Work Based VMT Per Employee* | **8.7** | **8.7** |

## VMT Calculator User Agreement

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

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

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

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

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

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

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

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

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

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

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

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

| You, the User | |
|---|---|
| By: |  |
| Print Name: | Jason Shender, AICP |
| Title: | Transportation Planner III |
| Company: | Linscott, Law & Greenspan, Engineers |
| Address: | 600 S. Lake Avenue, Suite 500<br>Pasadena, CA 91106 |
| Phone: | (626) 796-2322 |
| Email Address: | jshender@llgengineers.com |
| Date: | 7/13/2023 |