B-4 Alternative 8 Supplemental Transportation Analysis

From: Eduardo Hermoso <eduardo.hermoso@lacity.org>
Sent: Friday, August 21, 2020 7:52 AM
To: Milena Zasadzien <milena.zasadzien@lacity.org>
Cc: Planning.MajorProjects@lacity.org; Wes Pringle <wes.pringle@lacity.org>; Craig Bullock <craig.bullock@lacity.org>; Matthew masuda <matthew.masuda@lacity.org>; Bhuvan Bajaj <bhuvan.bajaj@lacity.org>; Taimour Tanavoli <taimour.tanavoli@lacity.org>; Pamela Teneza <pamela.teneza@lacity.org>; Quyen Phan <quyen.phan@lacity.org>; Tom Gaul <T.Gaul@fehrandpeers.com>
Subject: Re: 1701 N. Vine Street Mixed-Use Project

Milena,

DOT has reviewed the traffic analysis, dated August 2020, for the Hollywood Center Project Alternative 8 scenario contained in the Draft Environmental Impact Report (DEIR) for the mixed-use project located at parcels 1720, 1749, 1750 and 1770 Vine Street, 1770 Ivar Avenue, and 1733 North Argyle Avenue. Alternative 8, of the project would construct three new buildings, comprised of a 48-story market-rate residential building and a 13- story senior affordable housing building set aside for Very-Low Income and/or Extremely-Low Income Households, on the "West Site," and a 17-story office building on the "East Site." Alternative 8, would include 903 residential dwelling units (770 market-rate units and 133 senior affordable housing units), approximately 27,140 square feet of commercial floor area (fast food and high-turnover sit down restaurant uses), and approximately 386,347 square feet of office space. On April 3, 2020, a traffic analysis was submitted in compliance with Senate Bill 743 and the California Environmental Quality Act (CEQA) to estimate the significance of the project's impact in regard to Vehicle Miles Traveled (VMT) to be measured against the VMT thresholds established in DOT's Transportation Assessment Guidelines (TAG). The study was the subject of a DOT letter, dated April 10, 2020, which found that with the application of transportation demand management strategies (TDM), the proposed project would not have a significant VMT impact. DOT concurs with the August 2020, traffic analysis of the Alternative 8 scenario in the DEIR that changes to the project description would not create any new impacts and does not change the findings of DOT's April 10, 2020 letter.

Please contact our office if you have any questions.

Thank You

On Fri, Apr 10, 2020 at 1:57 PM Eduardo Hermoso <eduardo.hermoso@lacity.org> wrote:
Sorry, Typo. The address is 1720 N. Vine Street (as depicted on the letter) not 1701 N Vine Street.

On Fri, Apr 10, 2020 at 1:55 PM Eduardo Hermoso <eduardo.hermoso@lacity.org> wrote:
Milena,

The Department of Transportation has completed the Traffic Analysis for the proposed mixed-use development project for the location at 1701 N. Vine Street. A copy of the assessment letter is attached.

Please contact our office if you have any questions.

Thank You.

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FEHR PEERS

DRAFT TECHNICAL MEMORANDUM

To: Mike Harden and Jay Ziff, ESA

From: Tom Gaul, Miguel Nunez, and Johnny Schmidt

Date: August 2020

Subject: Supplemental Impact Analysis for the Hollywood Center Project Alternative 8

Ref: LA18-2987

This technical memorandum summarizes the results of the analysis conducted of potential impacts of Alternative 8: Office, Residential and Commercial Alternative (Alternative 8) considered in the proposed Hollywood Center Project (Project) Draft Environmental Impact Report (EIR) based on the City of Los Angeles Transportation Assessment Guidelines (TAG) for projects in the City of Los Angeles. A Transportation Assessment for the proposed Hollywood Center Project was submitted to the Los Angeles Department of Transportation (LADOT) and LADOT issued an assessment letter dated April 10, 2020. Additionally, the Transportation Assessment and LADOT assessment letter were included in Appendix N in the Hollywood Center Draft EIR.

Alternative 8, which was included in the Draft EIR, is being considered as a project alternative for implementation. This supplemental analysis was prepared to present a more detailed transportation analysis of the CEQA and non-CEQA transportation effects of the alternative. This memorandum provides findings and technical appendices that provide the following CEQA and non-CEQA analyses components for Alternative 8:

- Supplemental CEQA analysis:
  - Plans, Programs, Ordinances, or Policies Conflict Review
  - Vehicle Miles Traveled Analysis
  - Geometric Design Feature or Incompatible Use Hazards
- Supplemental non-CEQA analysis:
  - Pedestrian, Bicycle, and Transit Access
  - Project Access, Safety, and Circulation Evaluation
  - Construction Traffic
  - Residential Cut-through Analysis

The information provided in this supplemental analysis simply clarifies, amplifies, or refines the information and analysis provided in the Draft EIR, but does not make any changes that would meet the definition of "significant new information" as defined in CEQA Guidelines Section 15088.5. This supplemental analysis does not change or modify the Alternative 8 environmental analysis and conclusions in Section V. Alternatives, of the Draft EIR, but rather, provides additional details on the conclusions provided therein and provides additional details on the non-CEQA issue of additional intersections being analyzed. The next section describes Alternative 8 and the context, while subsequent sections contain the supplemental analysis described above.

ALTERNATIVE 8 DESCRIPTION AND CONTEXT

Alternative 8 is located on the parcels of 1720, 1749, 1750, and 1770 Vine Street, 1770 Ivar Avenue, and 1733 North Argyle Avenue. Alternative 8 is within the Hollywood Community Plan area and the Hollywood Redevelopment Plan area of the City of Los Angeles. The blocks containing the project site are bounded by Ivar Avenue to the west, Yucca Street to the north, Hollywood Boulevard to the south, and Argyle Avenue to the east as shown in Figure 1. Vine Street bisects the site, which creates two development subareas referred to as the "West Site" and the "East Site" (collectively, "Project Site").

Alternative 8 would be comprised of a new mixed-use development on an approximately 4.46-acre site. Alternative 8 is proposed within the existing Capitol Records Complex, comprised of the Capitol Records Building and the Gogerty Building. Alternative 8 would preserve approximately 114,303 square feet of floor area contained within the Capitol Records and Gogerty Buildings. Implementation of Alternative 8 would require demolishing the existing approximately 1,237 square feet commercial building located on the northwest corner of the West Site. Other existing uses on the Project Site in the form of parking lots would be replaced to develop a mix of land uses, including residential uses (market-rate and senior affordable housing units), commercial uses, parking, and associated landscape and open space amenities.

Three new buildings are proposed, including a 48-story market-rate residential building and a 13-story senior affordable housing building set aside for Very-Low Income and/or Extremely-Low Income Households, on the "West Site," and a 17-story office building on the "East Site." Alternative 8 would include 903 residential dwelling units (770 market-rate units and 133 senior affordable housing units), approximately 27,140 square feet of commercial floor area (fast food and high-turnover sit down restaurant uses), approximately 386,347 square feet of office space, 2,237 vehicle parking spaces, and 526 bicycle parking spaces. Site plans of Alternative 8 are shown in Figure 2A-2D.

Vehicular access to the Project Site would be provided by driveways located on Ivar Avenue, Yucca Street, and Argyle Avenue. General access to the West Site would be provided via a driveway on Ivar Avenue, and loading access to the West Site would be provided by a separate adjacent driveway on Ivar. Access to the East Site would be provided via a driveway on Argyle Avenue, across from James M. Nederlander Way[1] (shown on maps as Carlos Avenue). The intersection of this driveway with Argyle Avenue and James M. Nederlander Way would be controlled by a midblock traffic signal. Loading access to the East Site would also be provided via a public alley accessed from Argyle Avenue. The Yucca Street driveway, located between Vine Street and Argyle Avenue, would continue to provide access to the Capitol Records Building. There would be no vehicular access on Vine Street.

Pedestrian access to the Project Site for Alternative 8 would be provided via sidewalks around the perimeter of the Project Site, as well as a wide, landscaped paseo extending east-west through the Project Site. Residents, visitors, patrons, and employees arriving to the Project Site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking facilities. A signalized midblock crosswalk would be provided across Argyle

[1] James M. Nederlander Way is a private street.

Avenue that will help facilitate local pedestrian circulation and access by maintaining a path of east-west travel with the existing midblock crosswalk across Vine Street just north of the existing alley.

The Project includes transportation demand management (TDM) measures that will be incorporated into Alternative 8 and will be part of the Conditions of Approval. These TDM measures are listed in Table 1. The TDM program will result in trip reductions that are incorporated into the analysis and based on the best available quantitative research on TDM effectiveness.

STUDY AREA

Alternative 8 is proposed at the same location as the Project and is within the City of Los Angeles. Consistent with the Project, access will be provided from two streets, Ivar Avenue and Argyle Avenue, in Hollywood. Since Alternative 8 is estimated to generate more peak hour trips than the Project, the study area was revised for the Alternative 8 analysis per the guidance in the TAG to include additional signalized intersections where the alternative is estimated to add 100 or more net new peak hour trips. The expanded study area for Alternative 8 extends to the US-101 to the east, Franklin Avenue to the north, Wilcox Avenue to the west, and Sunset Boulevard to the south. The streets in the study area are under the jurisdiction of the City of Los Angeles. The study area also contains segments of the US-101 freeway, which is under the jurisdiction of the California Department of Transportation (Caltrans). Figure 1 provides a graphic depiction of the study area. The study area is an urban setting located near transit with a variety of land uses and densities. Per Public Resources Code Section 21099, a transit priority area is any area within a half mile of a major transit stop such as the Hollywood/Vine Red Line Station. Additionally, Alternative 8 is considered an infill development as it proposes to build on previously developed and underutilized parcels, such as parking lots.

Aside from the addition of analyzed intersections per the City's TAG, the study area and existing conditions for this analysis are provided in the Transportation Assessment in Appendix N-1 of the Draft EIR. Detail pertaining to the existing street system, freeways, street designations, planned transportation projects, transit facilities, pedestrian facilities, and the City of Los Angeles High-Injury Network can be found in Chapter 2 of Appendix N-1 in the Draft EIR.

CEQA TRANSPORTATION ANALYSES

This section provides findings for the following CEQA components for Alternative 8:

- Supplemental CEQA analysis:
    - Plans, Programs, Ordinances, or Policies Conflict Review
    - Vehicle Miles Traveled Analysis
    - Geometric Design Feature or Incompatible Use Hazards

PLANS, PROGRAMS, ORDINANCES, OR POLICIES CONFLICT REVIEW

The City's TAG include a review for conflicts with transportation-related plans, programs, ordinances, or policies. Based on applying the screening criteria 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. A project would not be shown to result in an impact merely based on whether a project would not implement a particular program, policy, plan or ordinance. Rather, it is the intention of this threshold test to ensure that proposed development does not conflict with nor preclude the City from implementing adopted programs, plans, and policies. This evaluation was conducted by reviewing City documents such as the Los Angeles Mobility Plan 2035, local community plan, land use element, Vision Zero plans, and municipal code sections, such as:

- Mobility Plan 2035 is 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 how they travel. The street standards were reviewed and compared to existing and future conditions resulting from Alternative 8 and it was determined that Alternative 8 is compliant with Mobility Plan 2035. See **Attachment A** for a review of consistency with relevant policies in Mobility Plan 2035.

- Community Plans make up the land use element of the City's General Plan and guide the physical development of neighborhoods, providing neighborhood level detail for land uses, the transportation network, policies, and implementation strategies. Alternative 8 is consistent with the transportation components of the Hollywood Community Plan. See **Attachment A** for a review of consistency with relevant policies in the Hollywood Community Plan.

- 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 on the high-injury network (HIN) should make improvements or fund them. Alternative 8 has proposed to install a new crosswalk across Argyle Avenue, provide bicycle parking, and integrate the adjacent pedestrian network to maintain connections with multimodal facilities. See **Attachment A** for a review of consistency with relevant policies in Vision Zero.

A project and cumulative review of the Plans, Programs, Ordinance, or Policy conflicts was conducted for Alternative 8 and detailed responses are provided in Attachment A. The conclusion of this analysis is that Alternative 8 would not result in conflicts with City of Los Angeles Plans, Programs, Ordinance, or Policies.

VEHICLE MILES TRAVELED ANALYSIS

LADOT developed a VMT Calculator tool to be used to assess the VMT impacts of proposed development projects within the City. The VMT Calculator also assesses the effectiveness of selected TDM measures proposed for a project based on available research. Analysis was conducted for Alternative 8 using the City's VMT analysis procedures and VMT Calculator. This analysis considered both Alternative 8's proposed land uses and the TDM program proposed as a project design feature.

Impact Criteria

The City's VMT impact criteria for development projects was adopted from guidance from OPR. Per the proposed criteria, a development project would have a potential significant impact if the project meets one or more of 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 (see table below). This criterion was used for the multifamily residential and senior affordable housing components of Alternative 8.

- 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 (see table below). The work VMT per employee criterion was used for the office component of Alternative 8.

- Local-serving retail development tends to shorten trips and reduce VMT whereas regional-serving retail development can lead to substitution of longer trips for shorter ones and could increase VMT. Local-serving is defined as retail uses less than 50,000 square feet. For Alternative 8, the retail/restaurant components of the alternative are therefore considered to be local serving and those portions of the project are considered to not have a significant VMT impact. This criterion was used for the restaurant components of Alternative 8.

- For mixed-use projects, evaluate each component separately and apply the impact criteria above for each individual land use.

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

VMT Impact Criteria (15% Below APC Average)

Area Planning Commission	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1

Alternative 8 is located within the Central APC.

Methodology

Per the City's procedures, household VMT per capita and work VMT per employee were estimated using the City's VMT Calculator tool by site for each Project option. The VMT Calculator starts with Institute of Transportation Engineers (ITE, 9th Edition) trip generation rates[2], and then implements the MXD (mixed-use) methodology from the U.S. EPA and utilizes socioeconomic, transit, and trip length data from the Los Angeles citywide travel demand model (itself calibrated to Los Angeles conditions) to adjust the trips for internalization, transit, and walkability. The VMT Calculator was calibrated based on local count data collected in the City of Los Angeles. Further information regarding the methods used by the VMT Calculator to estimate daily trips and daily VMT is provided in the City's VMT Calculator Documentation report[3]. In order to develop site-wide VMT estimates, the individual estimates for each site were normalized by that site's trip generation and then summed. The VMT Calculator allows for the selection of a wide variety of potential land uses including the multi-family housing, senior affordable housing, office, and restaurant uses proposed as part of Alternative 8. There is not a land use in the VMT Calculator for an outdoor performance space. The most similar option available in the VMT calculator is a movie theater and that use was used in place of the outdoor performance area because a movie theater is likely to draw from a larger area than a small outdoor space with smaller performances. This provides a more conservative VMT analysis.

The Alternative 8 VMT impact is considered significant if any one (or all) of the Alternative 8 land uses exceed the impact criteria identified in the Thresholds of Significance Section above 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.

For mixed-use projects, each component is evaluated separately and the impact criteria above is are applied for each relevant individual land use. The individual criterion for each land use was applied for Alternative 8.

The cumulative analysis considers both short- and long-term Alternative 8 effects on VMT. Short-term effects are evaluated in the detailed project-level VMT analysis described above. Cumulative effects are determined through a consistency check with the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (2016--2040 RTP/SCS). The 2016-2040 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 2016-2040 RTP/SCS does not specify any development may indicate a significant impact on transportation. However, for projects that do not demonstrate a project impact by applying an efficiency-based impact threshold (i.e., VMT per capita or VMT per

[2] The LA VMT Calculator was under development prior to release of the 10th Edition of ITE's trip generation manual in late 2017. The VMT Calculator was validated to LA conditions based on the empirical counts conducted at market rate residential, affordable housing, office, and mixed-use sites in the City, regardless of the source of the rates used as a starting point.

[3] City of Los Angeles, Department of Transportation (LADOT) and Los Angeles Department of City Planning (DCP), City of Los Angeles VMT Calculator Documentation, November 2019.

employee) in the project impact 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 greenhouse gas reduction goals of SCAG's 2016-2040 RTP/SCS.

TDM Program

A TDM program consists of strategies that are aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. Strategies included in a typical TDM program address a wide range of transportation factors, including parking, transit, commute trips, shared mobility, bicycle infrastructure, site design, education and encouragement, and management. Alternative 8is committing to implementing a variety of TDM strategies as a Project Design Feature. It is anticipated that Alternative 8 will be conditioned to include these TDM strategies as a requirement for approval of project entitlements. A list of the strategies included in Alternative 8's TDM program are presented in Table 1. These strategies were included as part of the VMT analysis.

TDM reductions for Alternative 8 were estimated based on the California Air Pollution Control Officers Association (CAPCOA) research and methodologies as described in Quantifying Greenhouse Gas Mitigation Measures (2010). Residential, senior affordable residential, office, and commercial land use TDM credits are calculated separately, as certain TDM measures are more appropriately employed for commercial or residential land uses. For example, for office or commercial tenants, vanpools and rideshare may be effective tools to reduce employee solo vehicle trips. However, vanpools would be difficult to implement for residents who are traveling from Alternative 8 to many disparate destinations. For residents, unbundling parking is more effective because residents are incentivized to reduce car ownership to save on condominium unit purchase price or monthly rental costs for a vehicular parking space. Additionally, the net effectiveness of commute trip reductions is reduced for the commercial land uses as those measures are only applicable to the work trips made by commercial land use employees, rather than the trips made by the commercial patrons.

Household VMT

As provided in Attachment B, the City of Los Angeles VMT Calculator was used to apply the Alternative 8 characteristics such as land uses, land use quantities, and TDM measures that are included as a project feature. The residential VMT was estimated for Alternative 8 as 4.8 daily household VMT per capita.

Alternative 8's estimated generation of 4.5 daily household VMT per capita is below the threshold of significance proposed for the Central APC of 6.0 daily household VMT per capita. Thus, Alternative 8 will not have a significant impact on household VMT per capita as estimated by the VMT Calculator. Images of the VMT Calculator outputs for the Alternative 8 are included below and additional details regarding the analysis are available in Attachment B.

Work VMT

The work VMT calculation is relevant to Alternative 8 due to the office land uses and is estimated as 5.0 daily work VMT per employee, which is below the threshold of significance proposed for the Central APC of 7.6 daily work VMT per employee. Thus, Alternative 8 will not have a significant impact on work VMT per employee as estimated by the VMT Calculator. As provided in Attachment B, the City of Los Angeles VMT Calculator was used to apply the Alternative 8 characteristics such as land uses, land use quantities, and TDM measures that are included as a project feature.

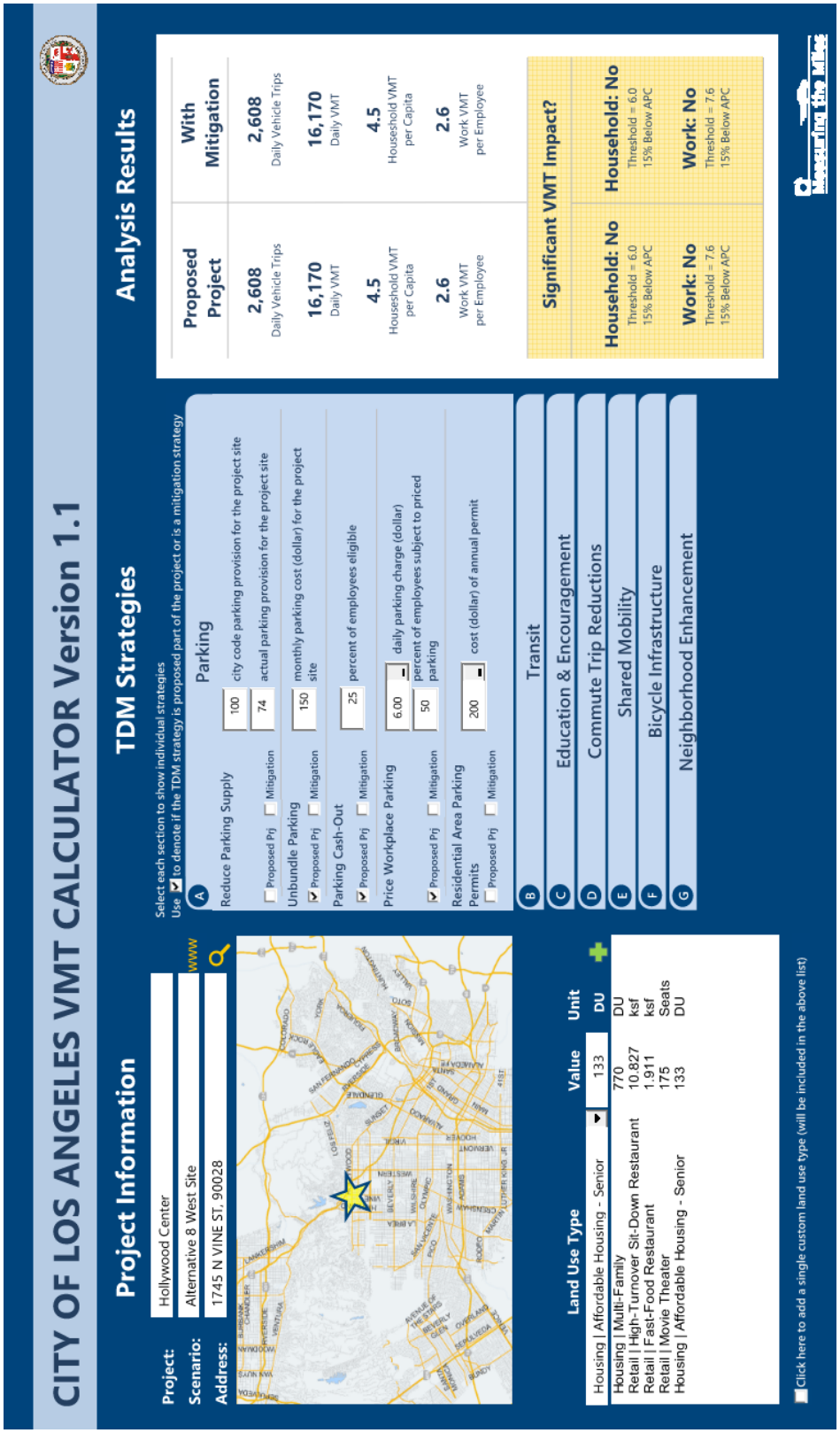
Retail VMT

As previously indicated, Alternative 8 is exempt from evaluation of the retail VMT because the retail components are less than 50,000 square feet and considered local serving.

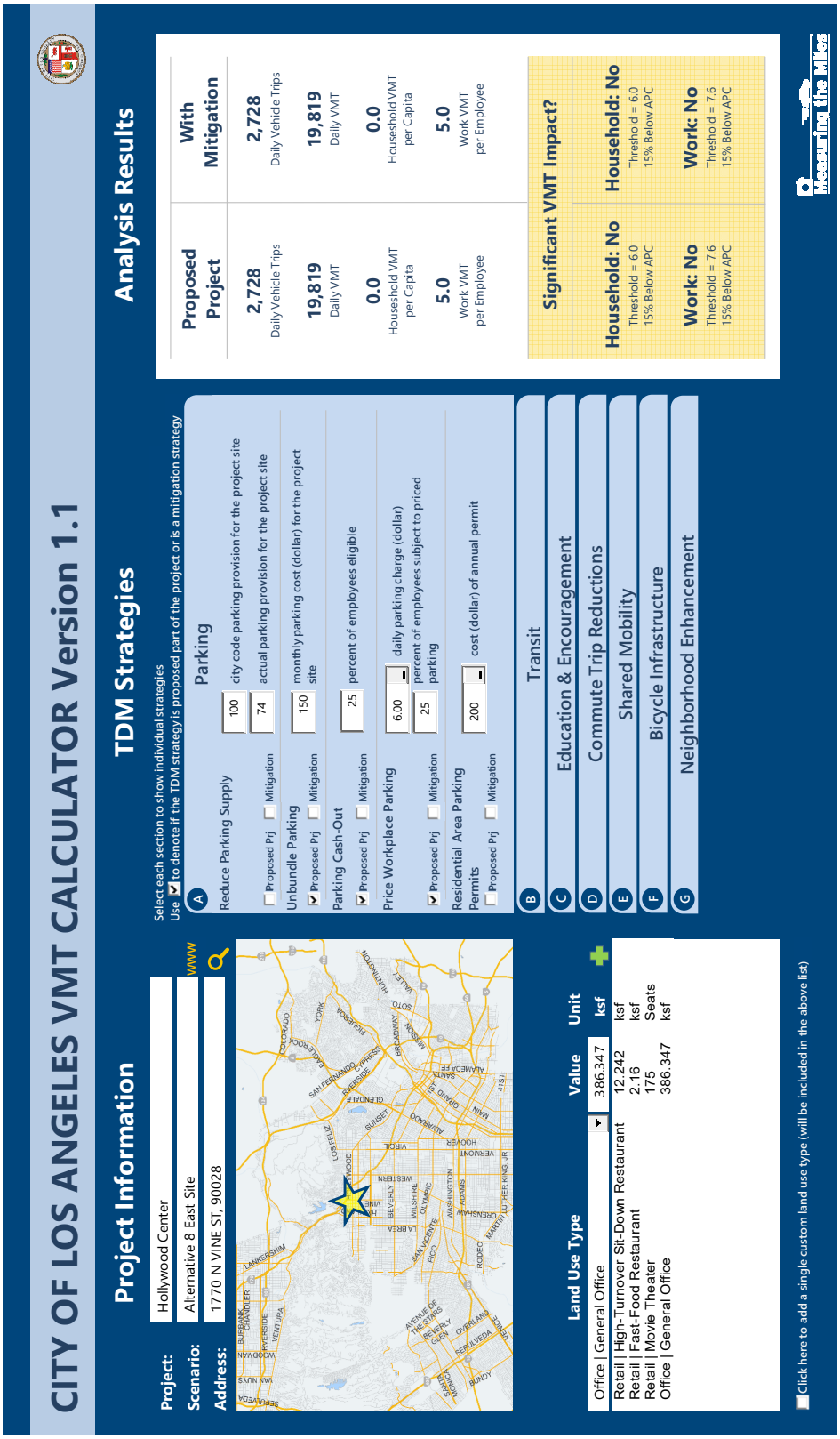
Cumulative VMT

According to the 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 project impact 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 the SCAG 2016-2040 RTP/SCS. As demonstrated in the project–level VMT analysis above, Alternative 8's household VMT per capita and work VMT per employee would be below the City's efficiency-based impact thresholds, and as such, Alternative 8's contribution to cumulative transportation VMT impacts would not be considerable. Furthermore, it is also acknowledged that Alternative 8 would be consistent with, and would not conflict with, applicable 2016-2040 RTP/SCS land use designations for this location.

Alternative 8 Residential VMT



Alternative 8 Work VMT



GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE HAZARDS

This section discusses impacts regarding the potential increase of hazards due to a geometric design feature that generally relates to the design of access points to and from Alternative 8 and may include safety, operational, or capacity impacts.

For vehicle, bicycle and pedestrian safety impacts, a review is conducted for Alternative 8 access points, internal circulation, and parking access from an operational and safety perspective (e.g., turning radii, driveway queuing, line-of-sight for turns into and out of project driveway[s]). Where Alternative 8 driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), the analysis considers operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts.

Pedestrian access to Alternative 8 would be provided via sidewalks around the perimeter of Alternative 8, as well as a wide, landscaped paseo extending east-west through the Project Site and connecting Ivar Avenue to Argyle Avenue. Residents, visitors, patrons, and employees arriving to the site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking facilities. A signalized mid-block crosswalk is proposed across Argyle Avenue to help facilitate local pedestrian circulation and access by maintaining a path of east-west travel with the existing mid-block crosswalks across Ivar Avenue and Vine Street. This signal would also control the intersection of Argyle Avenue with James M. Nederlander Way and a driveway for Alternative 8's East Site. Alternative 8's access locations would be designed to the City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian safety. All roadways and driveways will intersect at right angles. Street trees and other potential impediments to adequate driver and pedestrian visibility would be minimal. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets, parking facilities, and transit stops.

Alternative 8 would include the following two driveways providing vehicular access to parking lots on the Project Site:

- East Site – Full-access driveway aligned opposite James M. Nederlander Way providing signalized full access to and from Argyle Avenue
- West Site – Stop-controlled driveway with full-access to and from Ivar Avenue

Access to the Capitol Records Complex (including both the Capitol Records Building and the Gogerty Building) would continue to be provided via the existing driveway on Yucca Street. There would be no vehicular access on Vine Street.

While there are currently six curb cuts on the West Site and six curb cuts on the East Site (12 total), Alternative 8 would reduce the number of curb cuts to two curb cuts on the West Site and three curb cuts on the East Site. Furthermore, the existing curb cuts that would be removed would restore continuity to the sidewalks along the existing Walk of Fame.

On the East Site, the loading area is accessed via the alley behind the Pantages Theatre. This is south of the proposed Alternative 8 driveway/signal at Argyle Avenue & James M. Nederlander Way. On the West Site, service vehicles may access either driveway to reach the loading area.

The resident/visitor and service driveways would be designed to comply with LADOT standards. The driveways would not require the removal or relocation of existing passenger transit stops, and would be designed and configured to avoid potential conflicts with transit services and pedestrian traffic. The Alternative 8 frontage on Vine Street is part of the designated HIN, but no Alternative 8 driveways are proposed along this section. The Yucca Street driveway is along the HIN, but this is an existing access point and no modifications will be made to it as a result of Alternative 8. Therefore, Alternative 8 would not substantially increase hazards, conflicts, and would contribute to overall walkability through enhancements to the Project Site, streetscape, and crossing of Argyle Avenue. Attachment A contains more detailed responses to the TAG evaluation questions that support this conclusion.

NON-CEQA TRANSPORTATION ANALYSES

This section provides findings for the following CEQA components for Alternative 8:

- Supplemental non-CEQA analysis:
    - Pedestrian, Bicycle, and Transit Access
    - Project Access, Safety, and Circulation Evaluation
    - Construction Traffic
    - Residential Cut-through Analysis

PEDESTRIAN, BICYCLE, AND TRANSIT ANALYSIS

The pedestrian, bicycle, and transit facilities assessment is intended to determine a project's potential effects on pedestrian, bicycle, and transit facilities in the vicinity of the proposed project based on an evaluation of physical or demand-based considerations that would affect the experience of people utilizing the multimodal transportation network.

The pedestrian, bicycle, and transit facilities surrounding the Project Site were assessed to determine potential Alternative 8 effects on pedestrian, bicycle, and transit facilities in the vicinity of Alternative 8. This assessment applies the checklist from the TAG to evaluate whether direct or indirect project effects would lead to removal, modification, or degradation of pedestrian, bicycle, or transit facilities, such as:

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

- Removal of other existing transportation system elements supporting sustainable mobility

Based on the project description, proposed site plan, and evaluation conducted for the proposed Project and Alternative 8, there is no change to the TAG checklist responses, conclusions, or findings for this analysis as originally conducted for the Project. A detailed discussion and inventory, including a table and map, are available in the Transportation Assessment in Appendix N-1 of the Draft EIR.

PROJECT ACCESS, SAFETY, AND CIRCULATION EVALUATION

Based on applying the screening criteria and trip threshold for intersection analysis provided in the TAG, this section documents the intersection analysis conducted for Alternative 8. This analysis applies the same methodology for signalized/unsignalized intersection analysis, methodology adjustments for congested locations, trip generation, trip distribution, and traffic assignment as used in the Transportation Assessment for the original Project in Appendix N-1 of the Draft EIR, except that the trip generation has been modified to reflect Alternative 8.

Study Analysis Locations

The scope and selection of study intersections was developed in conjunction with LADOT staff. Fifteen study intersections have been analyzed for Alternative 8. The study locations were selected for analysis based on guidance from LADOT's TAG, which indicates that intersections immediately adjacent to the site and those in proximity to the site through which 100 or more project-generated trips would travel should be analyzed. The 15 intersections selected for analysis for Alternative 8 and the 17 residential street segments identified for cut-through analysis are illustrated in Figure 6 and are listed in Table 2A and Table 2B, respectively.

Analysis Methodology

The methodology and approach applied for this analysis is consistent with the approach and methodology described in the Transportation Assessment in Appendix N-1 of the Draft EIR. As a supplemental analysis to the Project, this analysis utilizes the same counts, related projects, and growth factors, resulting in the same existing and future without project conditions as those identified and analyzed in the Transportation Assessment. This supplemental analysis also applies the same level of service (LOS) methodologies applied in the Transportation Assessment and a detailed discussion is also available in Chapter 4 of the Transportation Assessment. As in the Transportation Assessment, the Critical Movement Analysis (CMA) was used for signalized intersections. Under the CMA methodology, a volume/capacity (V/C) ratio is generated for each study intersection based on factors such as the volume of traffic and the number of lanes providing for such vehicle movement and the V/C ratio is used to determine the corresponding LOS grade based on the LOS definitions in Table 3A. The HCM methodology was used for unsignalized intersections. Under this methodology, Under this methodology, an average delay is generated for the stop-controlled movements at the intersection based on traffic volumes and the type of traffic control and the average stop-controlled delay is used to find the corresponding LOS based on the LOS definitions in Table 3B.

The changes analyzed in this supplemental analysis pertain to the Alternative 8 proposed land uses, specifically:

- 770 market-rate residential dwelling units

- 133 senior affordable housing dwelling units
- 386,347 square feet of office space
- 4,071 square feet of fast-food restaurant
- 23,069 square feet of high-turnover sit-down restaurant
- 350 maximum attendees for the outdoor performance space

As described above, the methodology for the development of trip generation adjustments and estimates is consistent with guidance from the City of Los Angeles and prior project analysis. A detailed discussion can be found in Chapter 4 of the Transportation Assessment in Appendix N-1 of the Draft EIR.

Based on the land use quantities for Alternative 8, the trip generation estimates are shown in Table 4. Alternative 8 is estimated to generate approximately 532 net new vehicle trips during the morning peak hour and 833 net new vehicle trips during the afternoon peak hour. Additionally, since Alternative 8 adds an office component, a trip distribution specific to the office land use and surrounding area was developed based on information from the City of Los Angeles' Transportation Demand Model. Figures 4A, 4B, and 4C display the trip distribution for the residential, office, and retail uses, respectively. The estimated traffic generated by Alternative 8 was added to the existing traffic volumes to estimate Existing plus Project traffic volumes for Alternative 8. Similarly, the estimated traffic generated by Alternative 8 was added to the future 2027 and 2040 without traffic volumes to estimate Future 2027 plus Project and Future 2040 plus Project traffic volumes for Alternative 8, respectively. Attachment C shows the turning movement traffic volumes for the analyzed scenarios.

Level of service projections for with and without Alternative 8 for existing conditions, opening year 2027, and horizon year 2040 are provided in Tables 5A & 5B, 6A & 6B, and 7A & 7B, respectively.

Existing and Existing Plus Project Analysis

Existing No Project and Existing plus Project traffic volumes for Alternative 8, presented in Attachment C, were analyzed to determine the projected V/C ratio or delay, and LOS for each study intersection. Table 5A summarizes the Existing no Project and plus Project LOS for signalized intersections for Alternative 8. The following five signalized study intersections analyzed operate at LOS E or worse during one or both peak hours with and without Alternative 8:

2. Argyle Avenue & Franklin Ave/US-101 NB On-ramp Street
5. Argyle Avenue & Yucca Street
8. Cahuenga Boulevard & Hollywood Boulevard
10. Vine Street & Hollywood Boulevard
12. Gower Street & Hollywood Boulevard

Table 5B summarizes the Existing No Project and plus Project LOS for the unsignalized intersection at Argyle Avenue and the US-101 SB on-ramp for Alternative 8. The unsignalized intersection analyzed does not operate at LOS E or worse during one or both peak hours under Alternative 8.

Detailed intersection LOS analysis for signalized and unsignalized intersections is presented in Attachment D.

Future Year 2027 and 2040 No Project and Plus Project Analysis

Future 2027 No Project and plus Project traffic volumes for Alternative 8, presented in Attachment C, were analyzed to determine the projected V/C ratio or delay, and LOS for each study intersection. Table 6A summarizes the Future 2027 No project and plus Project LOS for signalized intersections for Alternative 8. The following eight signalized study intersections are projected to operate at LOS E or worse during one or both peak hours with and without Alternative 8:

1. Cahuenga Boulevard & Franklin Avenue
2. Argyle Avenue & Franklin Ave/US-101 NB On-ramp Street
5. Argyle Avenue & Yucca Street
8. Cahuenga Boulevard & Hollywood Boulevard
10. Vine Street & Hollywood Boulevard
11. Argyle Avenue & Hollywood Boulevard
12. Gower Street & Hollywood Boulevard
13. Bronson Avenue & Hollywood Boulevard

Table 6B summarizes the Future 2027 No Project and plus Project LOS for the unsignalized intersection at Argyle Avenue and the US-101 SB on-ramp for Alternative 8. The unsignalized intersection analyzed does not operate at LOS E or worse during one or both peak hours under Alternative 8.

Future 2040 No Project and plus Project traffic volumes for Alternative 8, presented in Attachment C, were analyzed to determine the projected V/C ratio or delay, and LOS for each study intersection. Table 7A summarizes the Future 2040 No Project and plus Project LOS for signalized intersections for Alternative 8. The following eight signalized study intersections are projected to operate at LOS E or worse during one or both peak hours with and without Alternative 8:

1. Cahuenga Boulevard & Franklin Avenue
2. Argyle Avenue & Franklin Ave/US-101 NB On-ramp Street
5. Argyle Avenue & Yucca Street
8. Cahuenga Boulevard & Hollywood Boulevard
10. Vine Street & Hollywood Boulevard
11. Argyle Avenue & Hollywood Boulevard
12. Gower Street & Hollywood Boulevard
13. Bronson Avenue & Hollywood Boulevard

Table 7B summarizes the Future 2040 no Project and plus Project LOS for the unsignalized intersection at Argyle Avenue and the US-101 SB on-ramp for Alternative 8. The unsignalized intersection analyzed does not operate at LOS E or worse during one or both peak hours under Alternative 8.

Detailed intersection LOS analysis for signalized and unsignalized intersections is presented in Attachment D.

Site Access

Alternative 8 would have the following two driveways providing vehicular site access:

- East Building – Full-access driveway aligned opposite James M. Nederlander Way providing signalized full access to and from Argyle Avenue
- West Building – Driveway would be stop-controlled with full-access to and from Ivar Avenue

Access to the Capitol Records Complex (including both the Capitol Records Building and Gogerty Building) would continue to be provided via the existing driveway on Yucca Street.

Vehicular access to the Project Site would be provided by driveways located on Ivar Avenue, Yucca Street, and Argyle Avenue. Access to the West Site would be provided via a driveway on Ivar Avenue. Loading access to the West Site would also be provided via Ivar Avenue. Vehicular access to the new buildings constructed on the East Site would be provided from Argyle Avenue via driveway opposite James M. Nederlander Way, which would also serve Capitol Records Building replacement parking located in the East Site parking facilities. The alley adjacent to the Pantages Theater would provide access to service vehicles. The Argyle Avenue & James M. Nederlander Way driveway would be signalized with a pedestrian crossing across Argyle Avenue, while the Ivar Street driveway and the Yucca Street driveway would be stop-controlled. Loading access to the East Site would also be provided via Argyle Avenue. The existing Yucca Street driveway, located between Vine Street and Argyle Avenue, would provide dedicated access to the Capitol Records Building parking lot. The Yucca driveway would continue to operate as a full-access driveway that is stop-controlled and is being analyzed as Alternative 8 would result in some of the parking spaces contiguous with the Capitol Records Building being replaced on-site. There would be no vehicular access on Vine Street.

The Ivar Avenue and Yucca Street driveways were analyzed using the Two-Way Stop Controlled (TWSC) methodology from the 2010 Highway Capacity Manual. The HCM methodology determines the average vehicle delay for the intersection approaches to find the corresponding LOS based on the definitions presented in Table 3B. The Argyle Avenue driveway is proposed to be signalized, providing access to the Alternative 8 East Site and Eastown apartment complex via James M. Nederlander Way. It would also provide a signalized pedestrian crosswalk to enhance the pedestrian network at the Project Site and the surrounding area. Due to its proposed signal, the Argyle Avenue & James M. Nederlander Way intersection was analyzed using the CMA methodology.

Driveway analysis LOS worksheets are included in Attachment D. Table 8A shows the results of the LOS analysis using HCM methodology at the unsignalized project driveways for Alternative 8. Table 8B shows the results of the LOS analysis using CMA methodology at the Argyle Avenue & James M. Nederlander Way intersection. Similarly to the analysis in the Transportation Assessment, the Argyle Avenue & James M. Nederlander Way driveway meets the signal warrants for one or more time periods for all project analysis scenarios.

As shown, the Ivar driveway and the Capital Records Complex driveway are projected to operate at LOS C or better through Future Year 2040 under Alternative 8. The Argyle Avenue & James M.

Nederlander Way signalized intersection is projected to operate at LOS D at Year 2027 and Year 2040 under Alternative 8.

CONSTRUCTION TRAFFIC

The LADOT TAG provides three categories to be considered in regard to in-street construction impacts: temporary traffic constraints, temporary loss of access, and temporary loss of bus stops or rerouting of bus lines. The factors to be considered in each of these categories are discussed in in the Transportation Assessment in Appendix N-1 of the Draft EIR, along with a detailed discussion of the construction schedule and construction traffic activity related to haul trucks, concrete trucks, equipment and delivery trucks, and construction employee traffic and parking.

The construction traffic activity for Alternative 8 is anticipated to be similar to that for the Project as evaluated in the Transportation Assessment and the Draft EIR. The haul routes would not change and the maximum potential number of haul trucks, concrete trucks, equipment and delivery trucks, and construction employee traffic would not exceed the peak activity levels described and analyzed in the Transportation Assessment; therefore no additional effects would be anticipated. A detailed quantitative assessment of construction level of service is available in Appendix I of the Transportation Assessment in Appendix N-1 of the Draft EIR.

A Construction Traffic Management Plan will be developed by the contractor and approved by the City of Los Angeles to alleviate construction period inconveniences. The Construction Traffic Management Plan will include several detailed measures listed in the Transportation Assessment.

RESIDENTIAL CUT-THROUGH ANALYSIS

This section presents the results of an analysis conducted regarding the potential for Alternative 8 impacts on analyzed local residential streets in neighborhoods near the Project Site. The analysis was conducted on 17 residential street segments surrounding the Project Site. These streets were selected in conjunction with the City of Los Angeles, as they were determined to have a greater likelihood of experiencing neighborhood cut-through traffic from Alternative 8. Residential streets were assessed for "excessive burdens" using criteria established by the City of Los Angeles.

The analysis for Alternative 8 was conducted in the same manner as the analysis for the original Project in the Transportation Assessment in Appendix N-1 of the Draft EIR. Twenty-four hour machine counts were conducted on the 17 analyzed street segments in May 2018. Future daily traffic volumes were projected in a manner similar to the peak hour analysis of the study intersections, including both ambient growth at 0.4% per year as well as anticipated traffic from related projects that could be constructed in the vicinity of the Project Site. The net new Alternative 8 trips were assigned to the street network based on the Alternative 8 trip distribution pattern presented above in Figures 4A-4C and were added to the future base projection to obtain Future plus Project projections for Alternative 8.

Neighborhood Street Evaluation Criteria

Under the City of Los Angeles guidelines, a local residential street would be considered excessively burdened if the new trips generated by Alternative 8 result in increases in average daily traffic (ADT) volumes as follows:

Projected ADT with Project (Final ADT)	Project-Related Increase in ADT
1 to 999	120 or more
1,000 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or more	8% or more of final ADT

Daily traffic volumes for the existing conditions are summarized in Table 9, projected future conditions for year 2027 are summarized in Table 10, and projected future conditions for year 2040 are summarized in Table 11 for Alternative 8. As shown in existing and future scenarios, Alternative 8 is projected to result in excessive burdens at one neighborhood street segment:

10. Yucca Street east of Vista Del Mar

Neighborhood Street Traffic Calming Program

Alternative 8 proposes to work with the City of Los Angeles and neighborhood residents to fund the development and implementation of a traffic calming plan for Yucca Street east of Vista Del Mar to minimize cut-through traffic on these streets. Traffic calming measures could involve physical measures such as changes in street alignment, installation of barriers, speed humps, speed tables, raised crosswalks, chicanes, chokers, and street closures and/or operational measures such as turn restrictions, speed limits, and installation of stop signs. Because implementation of neighborhood traffic controls on one street can cause intruding traffic to shift to other streets and because restrictive controls can be burdensome for residents, the precise measures suitable and acceptable for Yucca Street, if any, would be determined in consultation with the community, Council Office, and LADOT.

CORRECTIVE ACTIONS

Potential physical measures to improve traffic conditions at intersections in the vicinity of the Project Site were investigated as part of preparation of the Transportation Assessment, but no feasible physical measures were found. As noted in the LADOT Assessment Letter provided in Appendix N-2 of the Draft EIR, however, the following corrective measures were identified that would be funded by Alternative 8:

- One time financial contribution to the LADOT to be used in the implementation of a Mobility Hub in the general area of the Project Site.
- One-time financial contribution to the City's Bicycle Trust Fund to implement bicycle improvements in the vicinity of the Project Site.
- Financial contribution towards transportation system management improvements within the project area.
- Financial contribution to fund for constructing approved neighborhood traffic management measures within the project area.

These measures would also be required for Alternative 8.

FREEWAY FACILITIES ANALYSIS

The Transportation Assessment in the Draft EIR includes a memorandum that provides an analysis of potential Alternative 8 effects on elements of the State highway system. The California Department of Transportation (Caltrans) submitted two comment letters dated April 22, 2019 (in response to scoping meetings held on December 19, 2018 and February 26, 2019) and March 5, 2020.

In the 2019 letter, Caltrans requested queuing analysis of the following freeway ramps close to the Project Site:

- Cahuenga Boulevard & US 101 NB off-ramp
- Cahuenga Boulevard & US 101 SB off-ramp
- Vine Street/Franklin Avenue & US 101 SB off-ramp
- Gower Street & US 101 NB off-ramp
- Gower Street & US 101 SB off-ramp
- US 101 NB off-ramp & Hollywood Blvd
- US 101 SB off-ramp & Hollywood Blvd

Additionally, Caltrans recommended that the following locations be included in the mainline merge and weaving analysis:

- US 101 Odin Street to Cahuenga Boulevard
- US 101 Cahuenga Boulevard to Vine Street
- US 101 Vine Street to Gower Street
- US 101 Gower Street to Hollywood Boulevard
- US 101 Hollywood Boulevard to Sunset Boulevard

The Transportation Assessment appended to the Draft EIR includes an analysis of freeway segments near the Project Site where Alternative 8-related vehicles may access the freeway system. In addition, it also considers 'safety traffic concerns' raised in the Caltrans letter dated March 5, 2020. Per Public Resources Code §21159. and Senate Bill 375, projects that are consistent with the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) are exempt from California Environmental Quality Act (CEQA) impact analysis on the regional transportation network. Therefore, this analysis is provided for informational purposes. Please see Attachment E in this memo for an updated technical memorandum that provides an updated analysis for Alternative 8.

The freeway mainline on/off-ramp influence area analysis presented in Attachment E determined that the addition of Alternative 8-generated trips would not cause a substantial project or cumulative effect at any segment.

The queuing analysis presented in Attachment E determined that the freeway off-ramp queues would not extend beyond the length of the off-ramp capacity criteria at any of the locations requested for analysis by Caltrans as either a potential traffic conflict for State highway facilities or as a safety traffic concern. Thus, Alternative 8 would not result in a substantial project or cumulative effect, and would not affect safety traffic concerns at the analyzed locations.

This freeway facility and traffic safety analysis to State highway facilities for Alternative 8 is provided as a supplemental analysis to the Transportation Assessment in the Draft EIR for informational purposes.

SUMMARY

This memorandum documents the results of the supplemental analysis conducted for Alternative 8 consistent with the City's TAG. No significant impacts were found with respect to transportation based on a review of plans programs, ordinances and policies, VMT, and geometric design hazards or incompatible use for Alternative 8. Additionally, a non-CEQA analysis of the local and state transportation facilities was performed and is documented above.

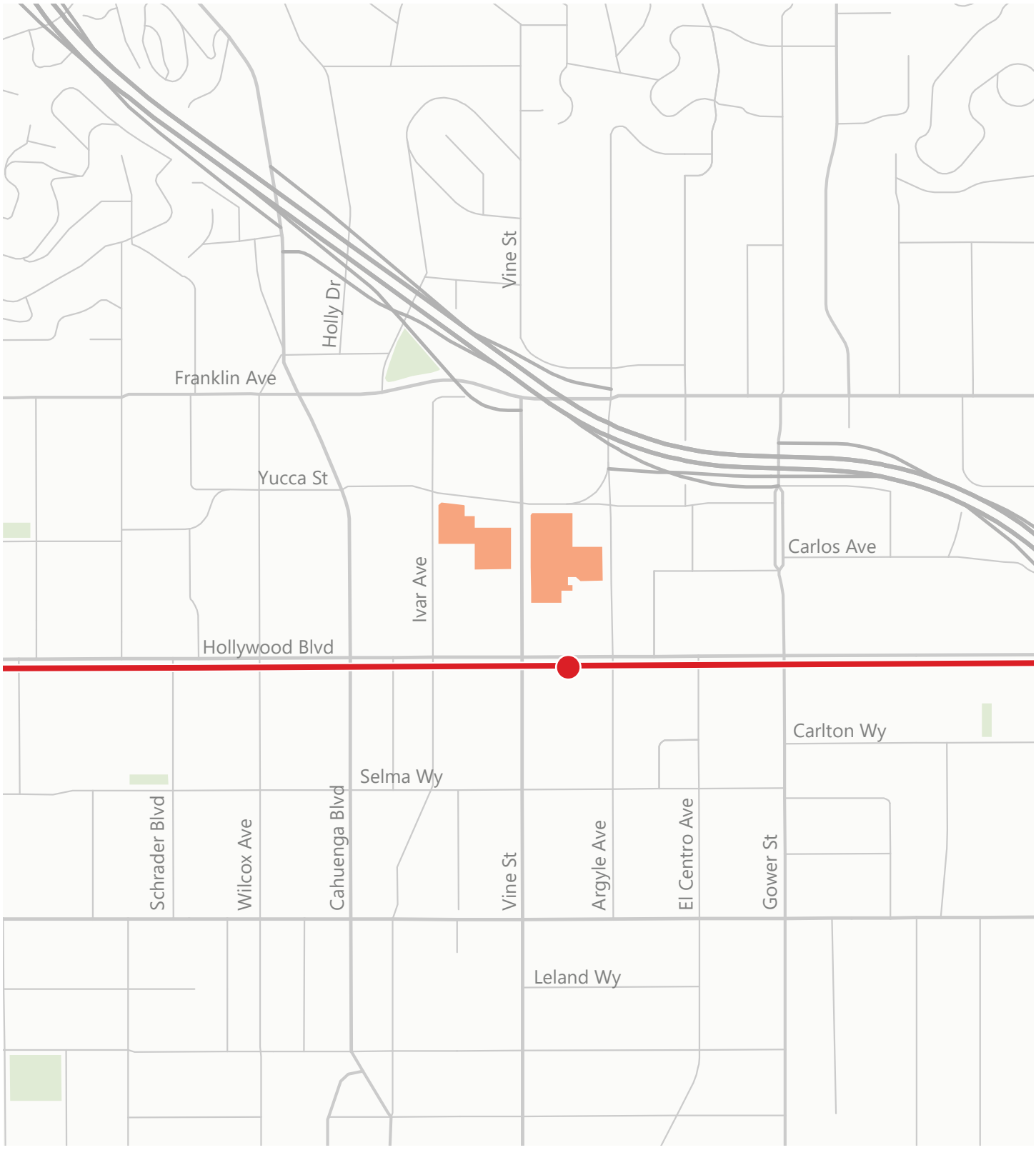


Figure 1

Alternative 8 Project Location & Study Area

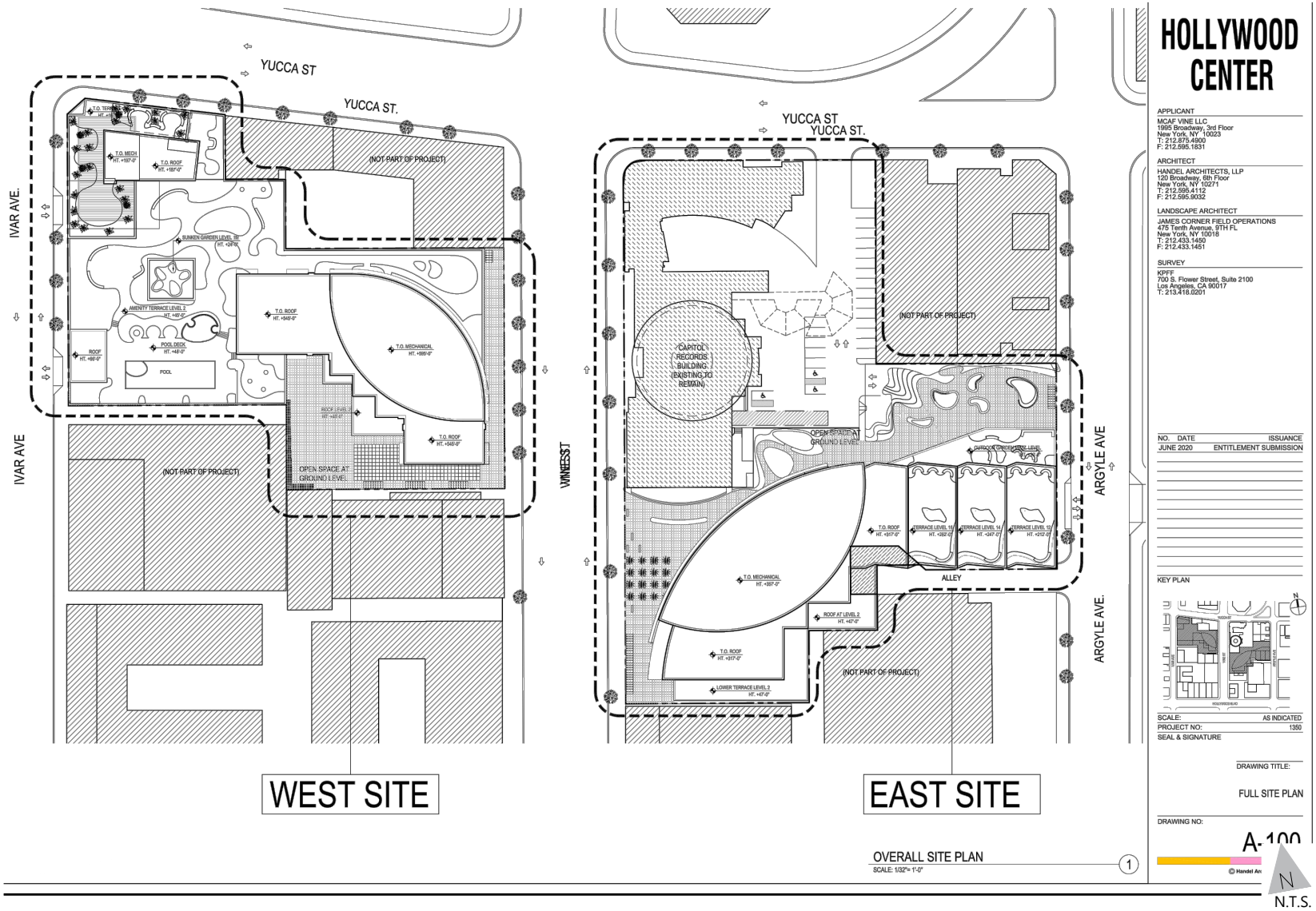


Figure 2A

Alternative 8 Site Plan
Hollywood Center

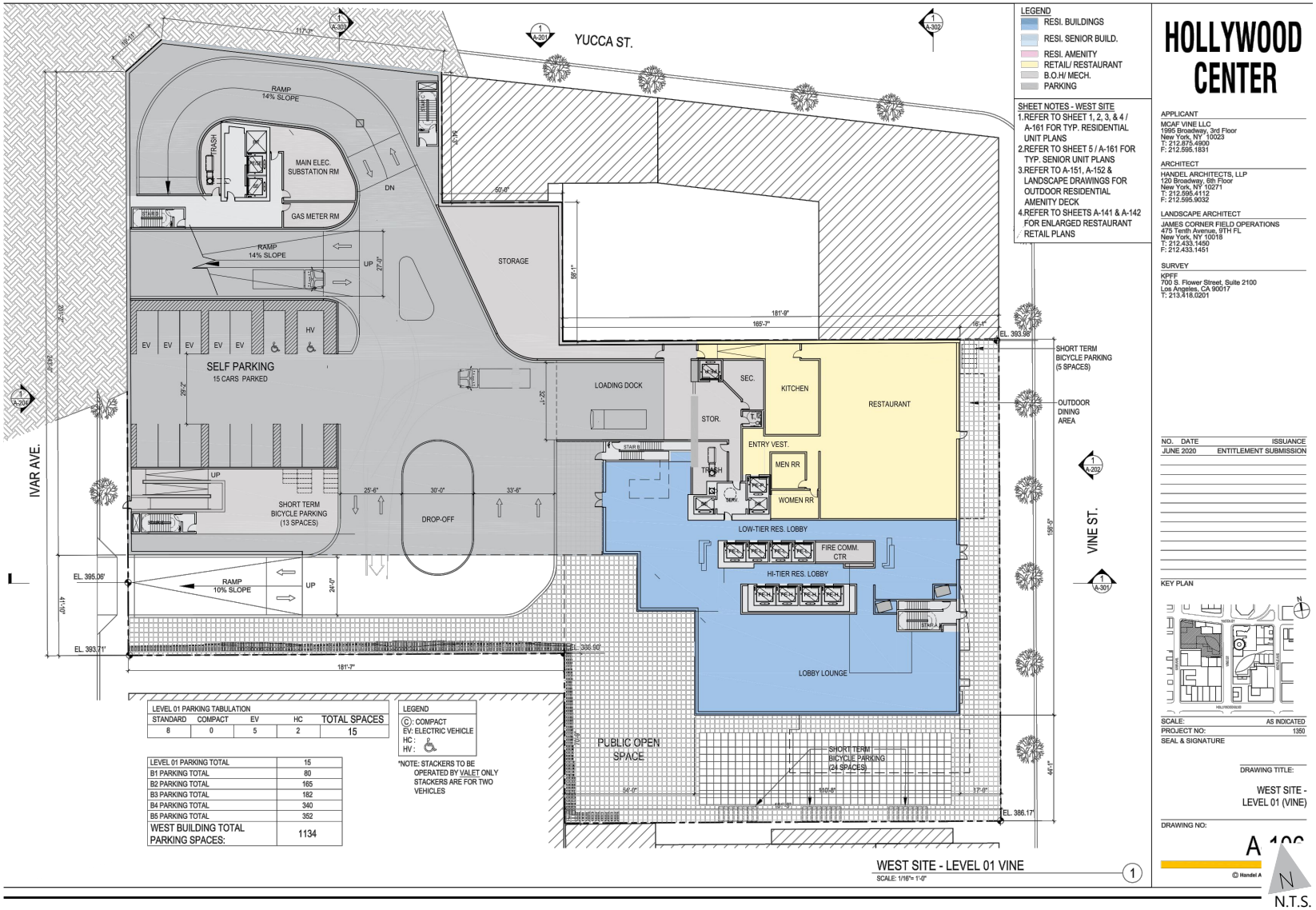
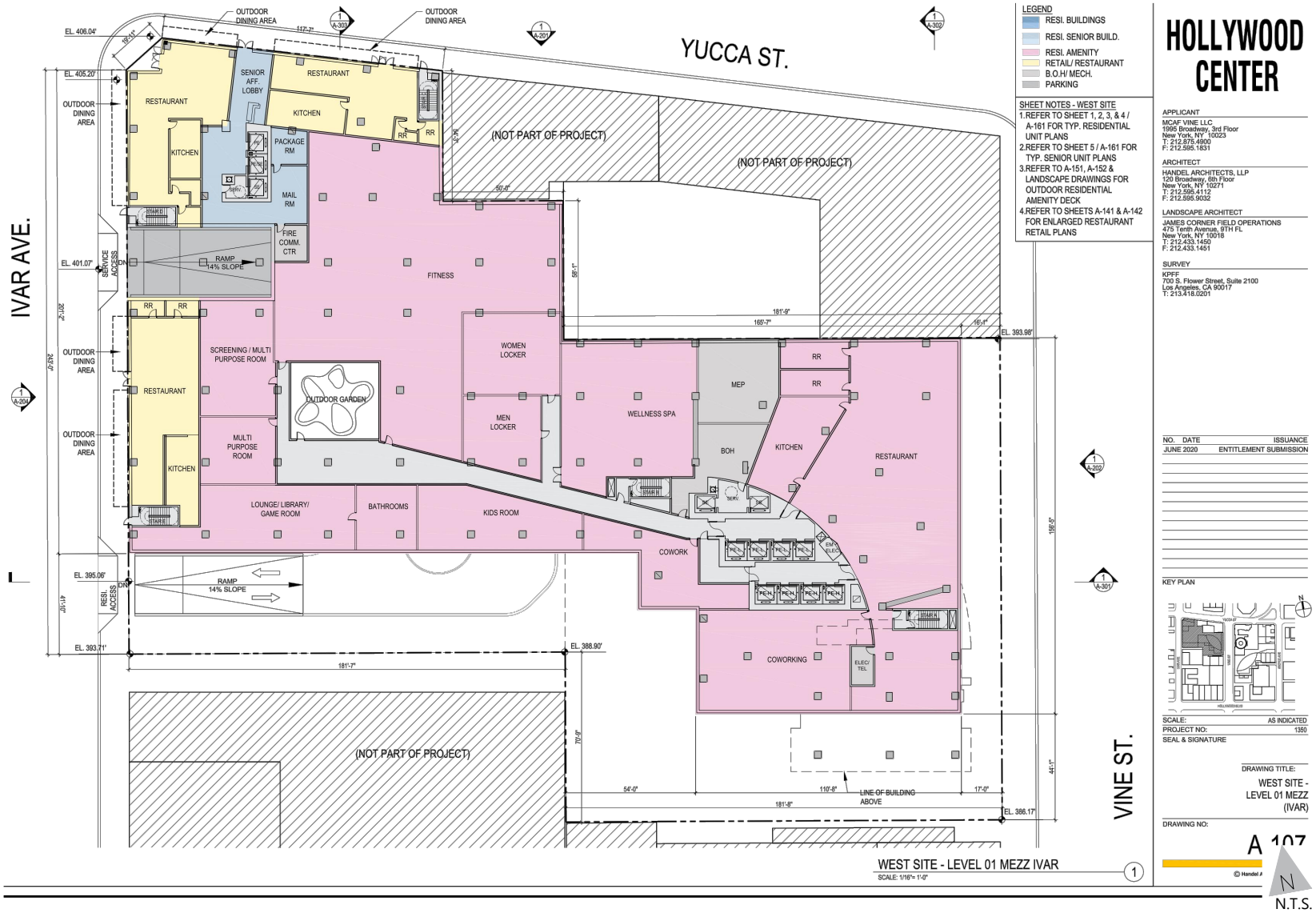


Figure 2B

Alternative 8 Site Plan
Hollywood Center



LEGEND
- RESI. BUILDINGS
- RESI. SENIOR BUILD.
- RESI. AMENITY
- RETAIL/ RESTAURANT
- B.O.H/ MECH.
- PARKING

SHEET NOTES - WEST SITE
1. REFER TO SHEET 1, 2, 3, & 4 / A-161 FOR TYP. RESIDENTIAL UNIT PLANS
2. REFER TO SHEET 5 / A-161 FOR TYP. SENIOR UNIT PLANS
3. REFER TO A-151, A-152 & LANDSCAPE DRAWINGS FOR OUTDOOR RESIDENTIAL AMENITY DECK
4. REFER TO SHEETS A-141 & A-142 FOR ENLARGED RESTAURANT RETAIL PLANS

HOLLYWOOD CENTER

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NO.	DATE	ISSUANCE
	JUNE 2020	ENTITLEMENT SUBMISSION

KEY PLAN

SCALE: AS INDICATED
PROJECT NO: 1350
SEAL & SIGNATURE

DRAWING TITLE:
WEST SITE - LEVEL 01 MEZZ (IVAR)

DRAWING NO:
A 107

N
N.T.S.

Figure 2C

Alternative 8 Site Plan
Hollywood Center

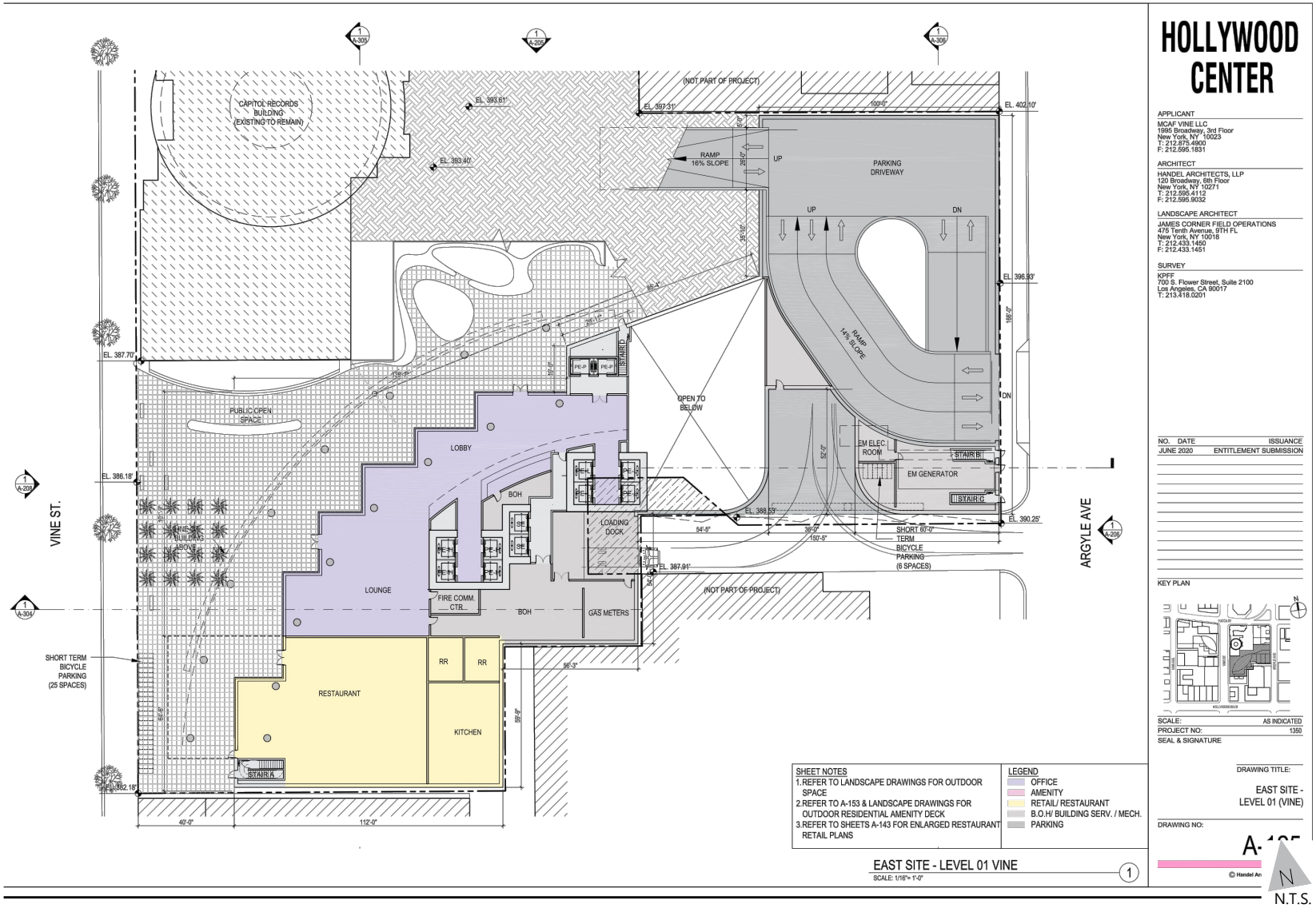


Figure 2D

Alternative 8 Site Plan
Hollywood Center

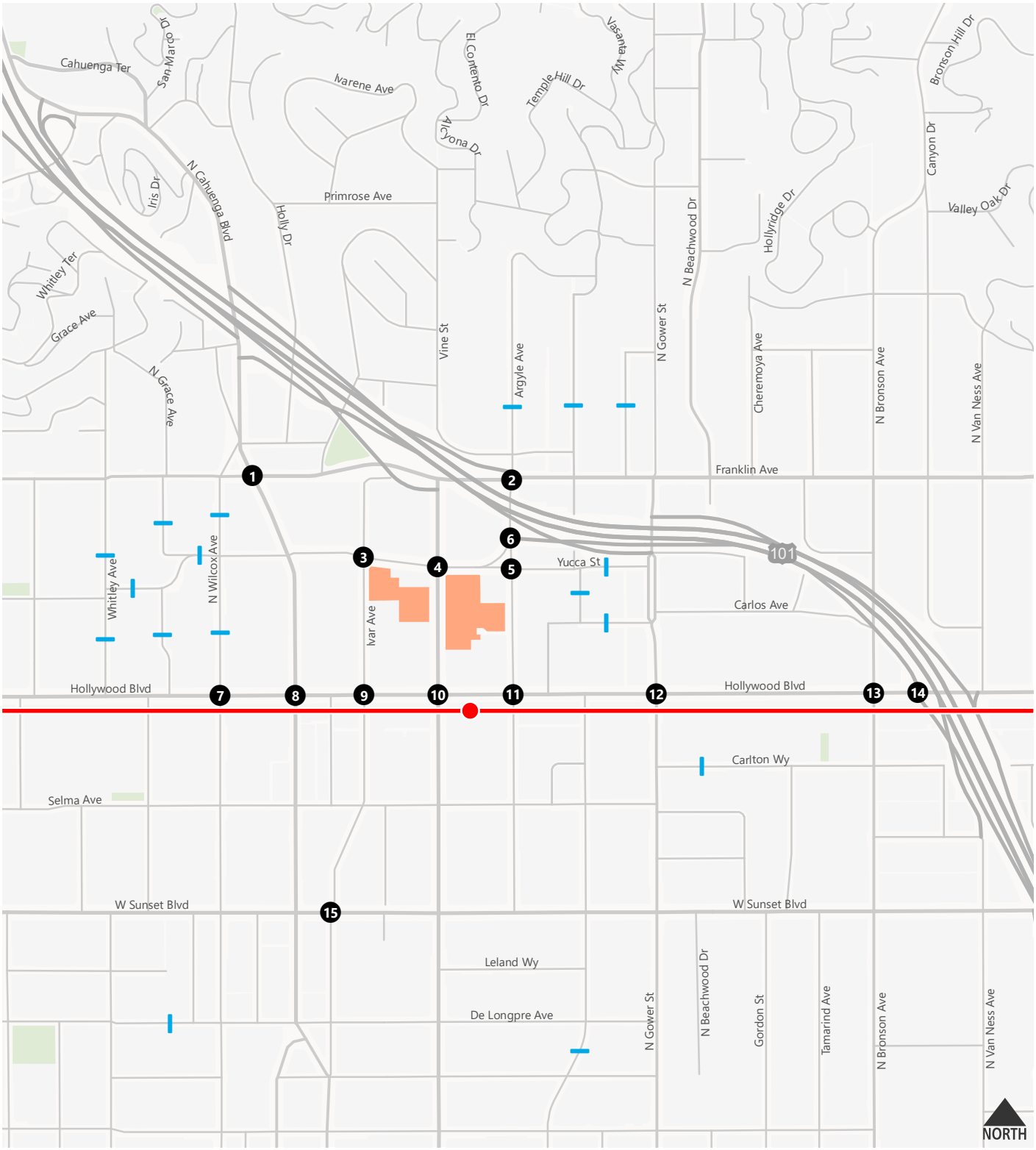
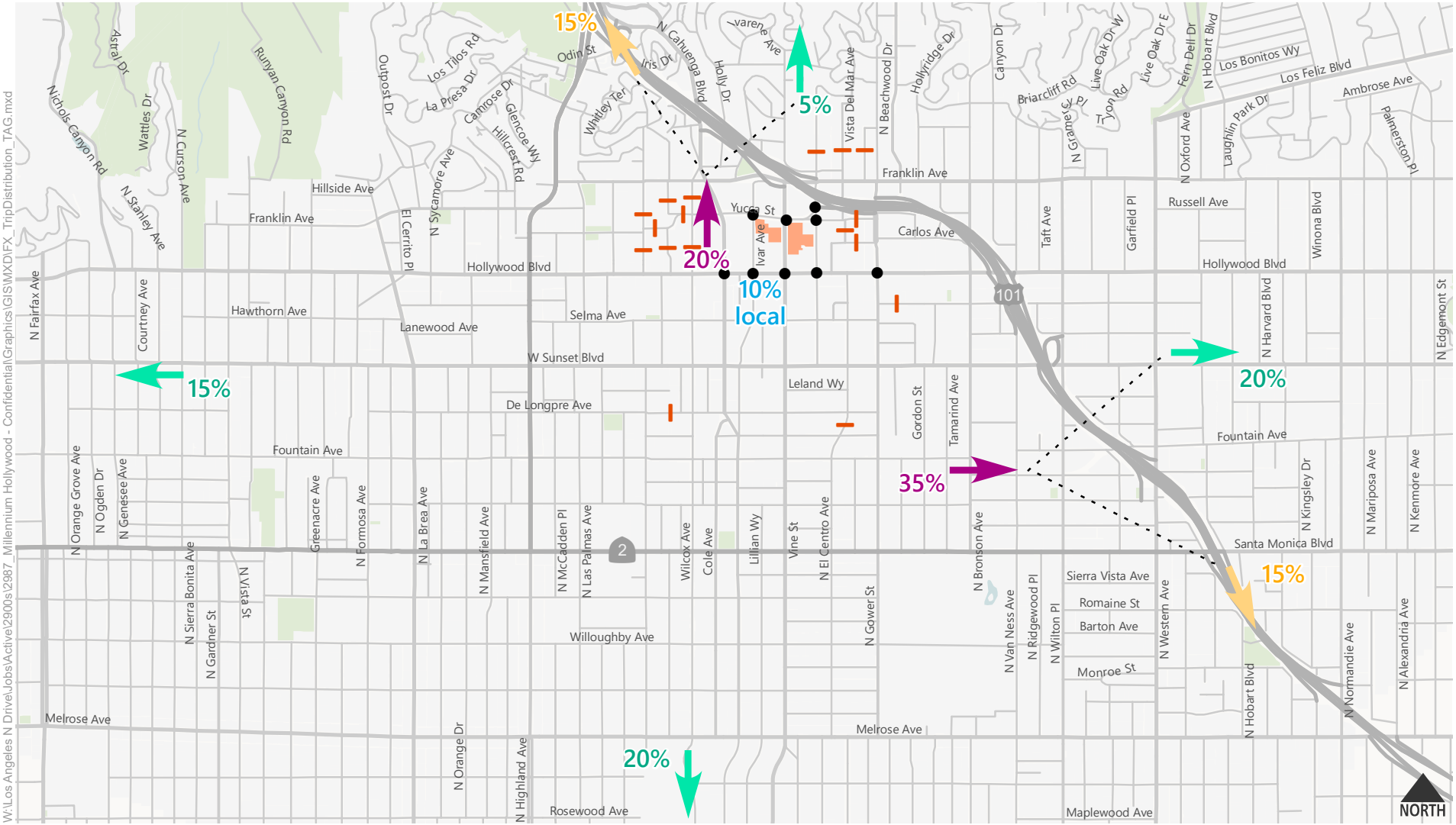


Figure 3

Alternative 8 Study Intersections



- Study Intersections
- Street Study Segment
- Project Site

- Initial Outbound Traffic Distribution

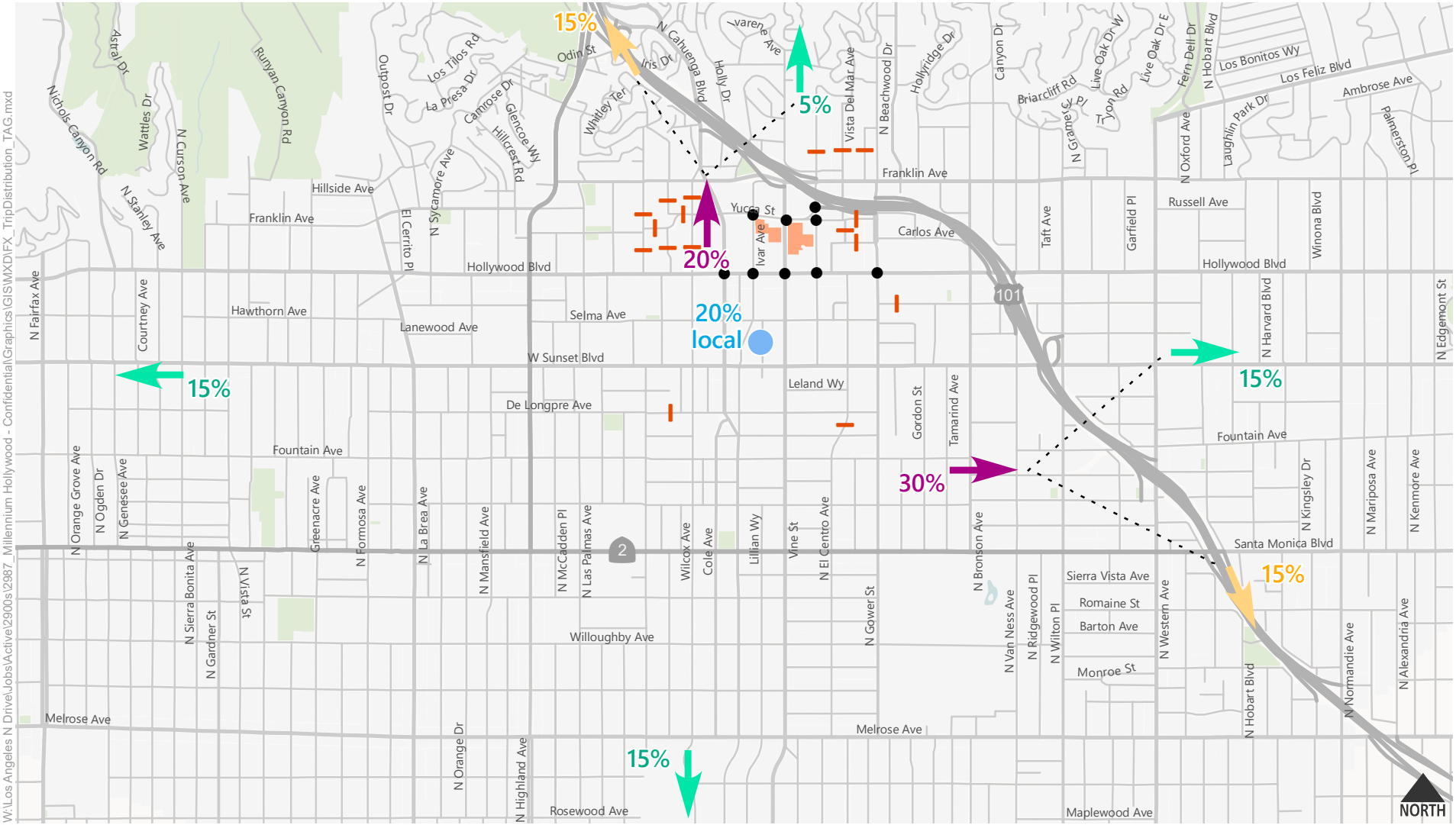
Initial Trip Distribution represents non-local traffic prior to being distributed to freeways or local streets.

- Local Traffic Distribution
- Final Street Traffic Distribution
- Final Freeway Traffic Distribution

Street, Freeway, and Local Traffic Distribution categories represent the total final trip distribution, summing to 100%.

Figure 4A

Alternative 8 Residential Trip Distribution



- Study Intersections
- Street Study Segment
- Project Site

- Initial Outbound Traffic Distribution

Initial Trip Distribution represents non-local traffic prior to being distributed to freeways or local streets.

- Local Traffic Distribution
- Final Street Traffic Distribution
- Final Freeway Traffic Distribution

Street, Freeway, and Local Traffic Distribution categories represent the total final trip distribution, summing to 100%.

Figure 4B

Alternative 8 Commercial Trip Distribution

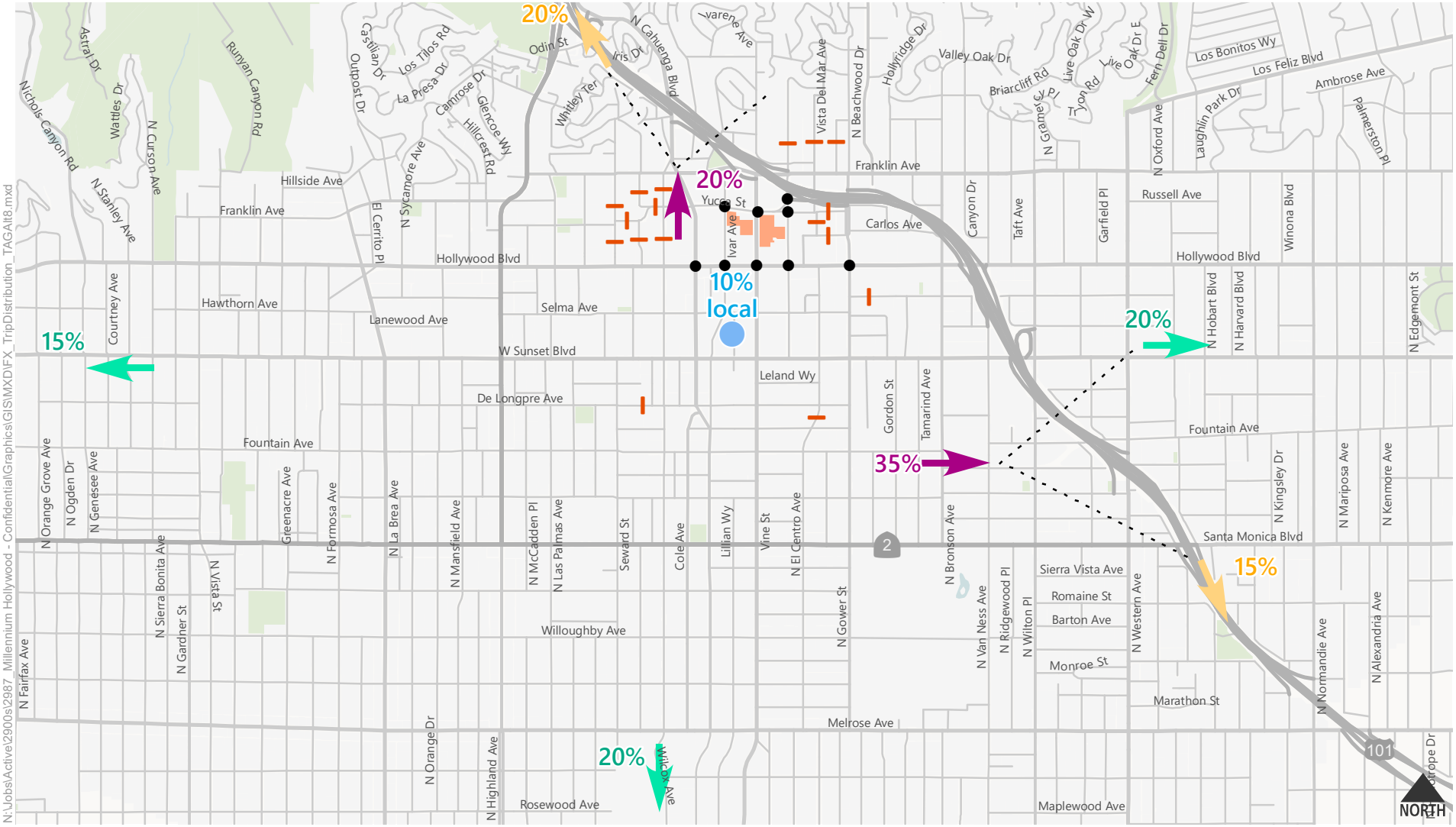


Figure 4C

Alternative 8 Office Trip Distribution

TABLE 1
HOLLYWOOD CENTER
TRANSPORTATION DEMAND MANAGEMENT PROGRAM

Parking
Unbundle residential parking and price according to market rate
Unbundle commercial parking coupled with pricing workplace parking and parking cash-out
Contribute to LADOT Express Park program to upgrade local parking meter technology
Daily parking discount for Metro Commuters
Transit
Provide a location on-site at which to purchase Metro passes and display bus info
Transit subsidies (available to residents and commercial employees) up to 50% of the cost of a monthly pass
Provide parking spaces for monthly lease to non-resident Metro park n ride users
Provide discounted daily parking to non-resident Metro transit pass holders
Immediately adjacent Metro bus stop upgrades
Commute Trip Reductions
Commute trip reduction program:
o rideshare (carpool/vanpool) matching and preferential parking
o guaranteed ride home (e.g., monthly Uber/Lyft/taxi reimbursement)
o encourage alternative work schedules and telecommuting for project residents
Business center/work center for residents working at home
Shared Mobility
On-site car share
Rideshare matching
On-site bike share station with subsidized or free membership (residents, employees); on-site guest bike share service (hotel) (if/when public bike share comes to Hollywood)
Coordination with LADOT Mobility Hub program
Bicycle Infrastructure
Develop a bicycle amenities plan
Bicycle parking (indoors & outdoors)
Bike lockers, showers, and repair station
Convenient access to on-site bicycle facilities (wayfinding, etc.)
Contribution towards City's Bicycle Plan Trust Fund
Site Design
Integrated pedestrian network within and adjacent to site (transit, bike, ped friendly)
External and internal multimodal wayfinding signage
Education & Encouragement
Transportation information center, kiosks and/or other on-site measures such as providing a Tenant Welcome Package (all new residents receive information on available alternative modes and ways to access destinations)
Tech-enabled mobility: incorporating commute planning, on-demand rideshare matching, shared-ride reservations, real-time traffic/transit information, push notifications about transportation choices, interactive transit screens, etc.
Marketing and promotions (including digital gamification – participants can log trips for prizes, promotions, discounts for local merchants, incentives, etc.)
Management
On-site TDM program coordinator and administrative support
Conduct user surveys
Join future Hollywood Transportation Management Organization (TMO)

TABLE 2A
HOLLYWOOD CENTER
STUDY INTERSECTIONS - ALTERNATIVE 8

ID	N/S Street Name	E/W Street Name
1	N Cahuenga Blvd	Franklin Ave
2	Argyle Ave	Franklin Ave
3	Ivar Ave	Yucca St
4	Vine St	Yucca St
5	Argyle Ave	Yucca St
6	Argyle Ave [a]	US-101 SB on-ramp
7	Wilcox Ave	Hollywood Blvd
8	Cahuenga Blvd	Hollywood Blvd
9	Ivar Ave	Hollywood Blvd
10	Vine St	Hollywood Blvd
11	Argyle Ave	Hollywood Blvd
12	Gower St	Hollywood Blvd
13	N Bronson Ave	Hollywood Blvd
14	US-101 SB ramps	Hollywood Blvd
15	Ivar Ave	Sunset Blvd

Notes:
[a] Traffic control device at this intersection is a stop sign.

TABLE 2B
HOLLYWOOD CENTER
STUDY SEGMENTS - ALTERNATIVE 8

1	Argyle Ave	north of Dix St
2	Vista Del Mar Ave	north of Dix St
3	Carmin Ave	north of Franklin Ave
4	Grace Ave	south of Franklin Ave
5	Wilcox Ave	south of Franklin Ave
6	Whitley Ave	south of Franklin Ave
7	Yucca St	east of Whitley Ave
8	Yucca St	west of Wilcox Ave
9	Vista Del Mar Ave	south of Yucca St
10	Yucca St	east of Vista Del Mar
11	Carlos Ave	east of Vista Del Mar
12	Whitley Ave	north of Hollywood Blvd
13	Hudson Ave	north of Hollywood Blvd
14	Wilcox Ave	north of Hollywood Blvd
15	Carlton Way	east of Grower St
16	De Longpre Ave	west of Hudson Ave
17	El Centro Ave	Afton Pl

TABLE 3A
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
CMA METHODOLOGY

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat what restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source:
Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980

TABLE 3B
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS

Level of Service	Average Control Delay (seconds/vehicle)
A	$\leq$ 10.0
B	> 10.0 and $\leq$ 15.0
C	> 15.0 and $\leq$ 25.0
D	> 25.0 and $\leq$ 35.0
E	> 35.0 and $\leq$ 50.0
F	> 50.0

Source:
Highway Capacity Manual, Transportation Research Board, 2010.

TABLE 4
HOLLYWOOD CENTER
TRIP GENERATION ESTIMATES - ALTERNATIVE 8

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]						Estimated Trip Generation					
			AM Peak Hour			PM Peak Hour			AM Peak Hour Trips			PM Peak Hour Trips		
			Rate	% In	% Out	Rate	% In	% Out	In	Out	Total	In	Out	Total
PROPOSED PROJECT														
High-Rise Residential	222	770 du	0.21	12%	88%	0.19	70%	30%	19	143	162	102	44	146
Less: Internal capture [b]				*6%*	*22%*		*24%*	*25%*	*(1)*	*(31)*	*(32)*	*(24)*	*(11)*	*(35)*
Less: TDM Program [c]			*16.7%*			*16.7%*			*(3)*	*(19)*	*(22)*	*(13)*	*(6)*	*(19)*
Net External High-Rise Res (before TNC adjustment)									15	93	108	65	27	92
Added TNC - from transit			*2.5%*			*2.5%*			3	3	6	2	2	4
Added TNC - from vehicles			*2.5%*			*2.5%*			2	0	2	1	2	3
TNCs already in vehicle trip generation									0	2	2	2	1	3
Total TNC									5	5	10	5	5	10
Non-TNC									15	91	106	63	26	89
Net External High-Rise Residential									20	96	116	68	31	99
Senior Affordable Housing	[d]	133 du	0.12	38%	62%	0.15	52%	48%	6	10	16	10	10	20
Less: Internal capture [b]				*6%*	*22%*		*24%*	*25%*	*0*	*(2)*	*(2)*	*(2)*	*(3)*	*(5)*
Less: TDM Program [c]			*14.6%*			*14.6%*			*(1)*	*(1)*	*(2)*	*(1)*	*(1)*	*(2)*
Net External Senior Affordable (before TNC adjustment)									5	7	12	7	6	13
Added TNC - from transit			*2.5%*			*2.5%*			0	0	0	0	0	0
Added TNC - from vehicles			*2.5%*			*2.5%*			0	0	0	0	0	0
TNCs already in vehicle trip generation									0	0	0	0	0	0
Total TNC									0	0	0	0	0	0
Non-TNC									5	7	12	7	6	13
Net External Senior Affordable Housing									5	7	12	7	6	13
General Office	710	386.3 ksf	0.83	86%	14%	0.87	17%	83%	276	45	321	57	279	336
Less: Internal capture [b]				*15%*	*64%*		*22%*	*4%*	*(43)*	*(29)*	*(72)*	*(13)*	*(12)*	*(25)*
Less: TDM Program [c]			*14.4%*			*14.4%*			*(31)*	*(5)*	*(36)*	*(8)*	*(37)*	*(45)*
Net External Office (before TNC adjustment)									202	11	213	36	230	266
Added TNC - from transit			*2.5%*			*2.5%*			5	5	10	7	7	14
Added TNC - from vehicles			*2.5%*			*2.5%*			0	5	5	6	1	7
TNCs already in vehicle trip generation									5	0	5	1	6	7
Total TNC									10	10	20	14	14	28
Non-TNC									197	11	208	35	224	259
Net External General Office									207	21	228	49	238	287
Fast Food Restaurant without drive-thru window	933,934	4.07 ksf	25.10	60%	40%	28.34	50%	50%	61	41	102	58	57	115
Less: Internal capture [b]	[f]			*24%*	*18%*		*10%*	*21%*	*(14)*	*(8)*	*(22)*	*(6)*	*(12)*	*(18)*
Less: TDM Program [c]			*1.2%*			*1.2%*			*(1)*	*0*	*(1)*	*(1)*	*0*	*(1)*
Less: Transit/walk credit [e]			*15%*			*15%*			*(7)*	*(5)*	*(12)*	*(7)*	*(7)*	*(14)*
Total Driveway Trips (before TNC adjustment)									39	28	67	44	38	82
Added TNC - from transit			*2.5%*			*2.5%*			2	2	4	2	2	4
Added TNC - from vehicles			*2.5%*			*2.5%*			1	1	2	1	1	2
TNCs already in vehicle trip generation									1	1	2	1	1	2
Total TNC									4	4	8	4	4	8
Non-TNC (before pass-by adjustment)									38	27	65	43	37	80
Total Driveway Trips									42	31	73	47	41	88
Less: Pass-by from net trips [g]			*50%*			*50%*			*(19)*	*(13)*	*(32)*	*(21)*	*(18)*	*(39)*
Non-TNC									19	14	33	22	19	41
Net External Fast Food Restaurant									23	18	41	26	23	49
High-Turnover Sit-Down Restaurant	932	23.07 ksf	9.94	55%	45%	9.77	63%	37%	126	103	229	142	83	225
Less: Internal capture [b]				*24%*	*18%*		*10%*	*21%*	*(30)*	*(19)*	*(49)*	*(14)*	*(18)*	*(32)*
Less: TDM Program [c]			*1.2%*			*1.2%*			*(1)*	*(1)*	*(2)*	*(1)*	*(1)*	*(2)*
Less: Transit/walk credit [e]			*15%*			*15%*			*(15)*	*(12)*	*(27)*	*(18)*	*(11)*	*(29)*
Total Driveway Trips (before TNC adjustment)									80	71	151	109	53	162
Added TNC - from transit			*2.5%*			*2.5%*			4	4	8	4	4	8
Added TNC - from vehicles			*2.5%*			*2.5%*			2	2	4	1	3	4
TNCs already in vehicle trip generation									2	2	4	3	1	4
Total TNC									8	8	16	8	8	16
Non-TNC (before pass-by adjustment)									78	69	147	106	52	158
Total Driveway Trips									86	77	163	114	60	174
Less: Pass-by from net trips [g]			*20%*			*20%*			*(15)*	*(13)*	*(28)*	*(21)*	*(10)*	*(31)*
Non-TNC									63	56	119	85	42	127
Net External High-Turnover Sit-Down Restaurant									71	64	135	93	50	143
Outdoor Performance Space	N/A	350 seats	0.00	0%	0%	1.00	50%	50%	0	0	0	175	175	350
Less: Internal capture [b]	[i]			*0%*	*0%*		*11%*	*11%*	*0*	*0*	*0*	*(19)*	*(20)*	*(39)*
Less: Transit credit [e]			*15%*			*15%*			*0*	*0*	*0*	*(24)*	*(23)*	*(47)*
Less: Walk credit [h]			*15%*			*15%*			*0*	*0*	*0*	*(20)*	*(20)*	*(40)*
Net External Performance Space (before TNC adjustment)									0	0	0	112	112	224
Added TNC - from transit			*2.5%*			*2.5%*			0	0	0	6	6	12
Added TNC - from vehicles			*2.5%*			*2.5%*			0	0	0	3	3	6
TNCs already in vehicle trip generation									0	0	0	3	3	6
Total TNC									0	0	0	12	12	24
Non-TNC									0	0	0	109	109	218
Net External Outdoor Performance Space									0	0	0	121	121	242
TOTAL DRIVEWAY TRIPS									**360**	**232**	**592**	**406**	**497**	**903**
TOTAL EXTERNAL TRIPS									**326**	**206**	**532**	**364**	**469**	**833**

Notes:

The proliferation of shared mobility transportation network companies (TNCs), such as Lyft and Uber, in recent years is important to consider in a project of this size. In order to account for TNCs, it was assumed that TNCs would account for 5% of the vehicle trips generated by each land use. Available empirical evidence indicates that TNC trips replace both transit/bike/walk trips and private vehicle trips. Therefore, 2.5% of the TNC trips were considered to replace transit trips, which results in an additional vehicle trip in and out of the site that would not have been considered in the basic trip generation rates. The 2.5% of TNC trips attributed to the replacement of private vehicles result in an additional vehicle trip added only to the opposite movement of the vehicle trip already considered in the basic trip generation rates. TNC vehicles will have a loading/unloading zone inside of the project site and were included in the total

a. Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition* , 2017, unless otherwise noted.
b. Internal capture represents the percentage of trips between land uses that occur within the site. This percentage is informed by MXD 2.0 Mixed Use Trip Generation Methodology, which incorporated the findings of NCHRP Project 8-51 as described in "Improved Estimation for Internal Trip Capture for Mixed-use Developments," *ITE Journal* , August 2010.
c. Credit for the TDM program has been calculated based on CAPCOA guidelines.
d. Trip generation rate from empiricial study "Infill and Complete Streets Study - Tasks 2.1B & 2.1C Local Trip Generation Study", LADOT 2017.
e. 15% credit to account for transit access to the project site. Source: LADOT's *Traffic Study Policies and Procedures* , December 2016.
f. ITE does not provide a daily rate for land use code 933. The daily rate for land use code 934 was utilized instead.
g. Pass-by credit based on Attachment I of LADOT's *Traffic Study Policies and Procedures* , December 2016.
h. Walk credit is applied to reflect pedestrians walking in area who stop in to observe performance they see or hear when walking by or around project site.
i. Performance space trip generation estimates based on performance schedules programmed for site, amount of space that will be allowed for performance watching (accounting for pedestrian circulation and walkways), and site patrons who may drive to utilize the ground floor open space amenities.

TABLE 5A
HOLLYWOOD CENTER
EXISTING YEAR (2018) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
SIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	EXISTING (2018)		EXISTING + PROJECT	
			V/C	LOS	V/C	LOS
1	N Cahuenga Blvd & Franklin Ave	AM	0.824	D	0.833	D
		PM	0.623	B	0.647	B
2	Argyle Ave & Franklin Ave/US-101 NB on-ramp	AM	0.721	F*	0.730	F*
		PM	0.735	F*	0.754	F*
3	Ivar Ave & Yucca St	AM	0.218	A	0.283	A
		PM	0.261	A	0.329	A
4	Vine St & Yucca St	AM	0.395	A	0.431	A
		PM	0.450	A	0.479	A
5	Argyle Ave & Yucca St	AM	0.192	F*	0.244	F*
		PM	0.427	F*	0.511	F*
7	Wilcox Ave & Hollywood Blvd	AM	0.603	B	0.613	B
		PM	0.526	A	0.549	A
8	Cahuenga Blvd & Hollywood Blvd	AM	0.743	F*	0.756	F*
		PM	0.493	F*	0.519	F*
9	Ivar Ave & Hollywood Blvd	AM	0.368	A	0.434	A
		PM	0.427	A	0.521	A
10	Vine St & Hollywood Blvd	AM	0.685	F*	0.696	F*
		PM	0.679	F*	0.716	F*
11	Argyle Ave & Hollywood Blvd	AM	0.437	A	0.507	A
		PM	0.645	B	0.753	C
12	Gower St & Hollywood Blvd	AM	0.541	F*	0.567	F*
		PM	0.585	F*	0.610	F*
13	N Bronson Ave & Hollywood Blvd	AM	0.536	A	0.552	A
		PM	0.647	B	0.664	B
14	US-101 SB ramps & Hollywood Blvd	AM	0.463	A	0.479	A
		PM	0.417	A	0.434	A
15	Ivar Ave & Sunset Blvd	AM	0.439	A	0.460	A
		PM	0.461	A	0.489	A

Note:
* LOS based on field observations since the CMA methodology does not account for vehicular queues along corridors, pedestrians, conflicts, etc. in every case. Thus, the calculated average operating conditions may appear better that what is observed in the field.

TABLE 5B
HOLLYWOOD CENTER
EXISTING YEAR (2018) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
UNSIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	INTERSECTION CONTROL	EXISTING (2018)		EXISTING + PROJECT	
				Delay (sec)	LOS	Delay (sec)	LOS
6	Argyle Ave & US-101 SB on-ramp	AM	Uncontrolled	2.0	A	1.7	A
		PM		2.4	A	2.1	A

Notes:

Average vehicular delay reported for worst case approach for unsignalized intersections.

TABLE 6A
HOLLYWOOD CENTER
FUTURE YEAR (2027) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
SIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027) NO PROJECT		FUTURE (2027) + PROJECT	
			V/C	LOS	V/C	LOS
1	N Cahuenga Blvd & Franklin Ave	AM	0.981	E	0.991	E
		PM	0.825	D	0.849	D
2	Argyle Ave & Franklin Ave/US-101 NB on-ramp	AM	0.903	F*	0.912	F*
		PM	0.976	F*	0.997	F*
3	Ivar Ave & Yucca St	AM	0.238	A	0.303	A
		PM	0.284	A	0.351	A
4	Vine St & Yucca St	AM	0.515	A	0.551	A
		PM	0.555	A	0.584	A
5	Argyle Ave & Yucca St	AM	0.365	F*	0.401	F*
		PM	0.617	F*	0.701	F*
7	Wilcox Ave & Hollywood Blvd	AM	0.776	C	0.786	C
		PM	0.815	D	0.841	D
8	Cahuenga Blvd & Hollywood Blvd	AM	1.001	F*	1.014	F*
		PM	0.821	F*	0.847	F*
9	Ivar Ave & Hollywood Blvd	AM	0.486	A	0.552	A
		PM	0.615	B	0.708	C
10	Vine St & Hollywood Blvd	AM	0.957	F*	0.969	F*
		PM	1.019	F*	1.067	F*
11	Argyle Ave & Hollywood Blvd	AM	0.731	C	0.812	D
		PM	1.011	F	1.119	F
12	Gower St & Hollywood Blvd	AM	0.855	F*	0.875	F*
		PM	0.935	F*	0.967	F*
13	N Bronson Ave & Hollywood Blvd	AM	0.761	C	0.777	C
		PM	0.971	E	0.988	E
14	US-101 SB ramps & Hollywood Blvd	AM	0.651	B	0.667	B
		PM	0.678	B	0.695	B
15	Ivar Ave & Sunset Blvd	AM	0.593	A	0.613	B
		PM	0.665	B	0.699	B

Note:
* LOS based on field observations since the CMA methodology does not account for vehicular queues along corridors, pedestrians, conflicts, etc. in every case. Thus, the calculated average operating conditions may appear better that what is observed in the field.

TABLE 6B
HOLLYWOOD CENTER
FUTURE YEAR (2027) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
UNSIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	INTERSECTION CONTROL	FUTURE (2027) NO PROJECT		FUTURE (2027) + PROJECT	
				Delay (sec)	LOS	Delay (sec)	LOS
4	Argyle Ave & US-101 SB on-ramp	AM	Uncontrolled	1.9	A	1.7	A
		PM		3.2	A	3.0	A

Notes:
Average vehicular delay reported for worst case approach for unsignalized intersections.

TABLE 7A
HOLLYWOOD CENTER
FUTURE YEAR (2040) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
SIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2040) NO PROJECT		FUTURE (2040) + PROJECT	
			V/C	LOS	V/C	LOS
1	N Cahuenga Blvd & Franklin Ave	AM	1.029	F	1.039	F
		PM	0.863	D	0.886	D
2	Argyle Ave & Franklin Ave/US-101 NB on-ramp	AM	0.947	F*	0.955	F*
		PM	1.019	F*	1.040	F*
3	Ivar Ave & Yucca St	AM	0.255	A	0.319	A
		PM	0.303	A	0.369	A
4	Vine St & Yucca St	AM	0.541	A	0.577	A
		PM	0.583	A	0.613	B
5	Argyle Ave & Yucca St	AM	0.381	F*	0.417	F*
		PM	0.645	F*	0.729	F*
7	Wilcox Ave & Hollywood Blvd	AM	0.813	D	0.823	D
		PM	0.847	D	0.873	D
8	Cahuenga Blvd & Hollywood Blvd	AM	1.047	F*	1.059	F*
		PM	0.852	F*	0.879	F*
9	Ivar Ave & Hollywood Blvd	AM	0.511	A	0.577	A
		PM	0.642	B	0.735	C
10	Vine St & Hollywood Blvd	AM	1.000	F*	1.012	F*
		PM	1.062	F*	1.110	F*
11	Argyle Ave & Hollywood Blvd	AM	0.757	C	0.839	D
		PM	1.049	F	1.157	F
12	Gower St & Hollywood Blvd	AM	0.887	F*	0.907	F*
		PM	0.969	F*	1.001	F*
13	N Bronson Ave & Hollywood Blvd	AM	0.793	C	0.809	D
		PM	1.011	F	1.027	F
14	US-101 SB ramps & Hollywood Blvd	AM	0.680	B	0.696	B
		PM	0.705	C	0.722	C
15	Ivar Ave & Sunset Blvd	AM	0.621	B	0.642	B
		PM	0.694	B	0.727	C

Note:
* LOS based on field observations since the CMA methodology does not account for vehicular queues along corridors, pedestrians, conflicts, etc. in every case. Thus, the calculated average operating conditions may appear better that what is observed in the field.

TABLE 7B
HOLLYWOOD CENTER
FUTURE YEAR (2040) PLUS PROJECT INTERSECTION ANALYSIS - ALTERNATIVE 8
UNSIGNALIZED STUDY INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	INTERSECTION CONTROL	FUTURE (2040)		FUTURE (2040) + PROJECT	
				Delay (sec)	LOS	Delay (sec)	LOS
6	Argyle Ave & US-101 SB on-ramp	AM	Uncontrolled	2.0	A	1.8	A
		PM		3.3	A	3.2	A

Notes:
Average vehicular delay reported for worst case approach for unsignalized intersections.

TABLE 8A
SITE ACCESS - ALTERNATIVE 8
HCM ANALYSIS

INTERSECTION	CONTROL	PEAK HOUR	EXISTING + PROJECT		FUTURE (2027) + PROJECT		FUTURE (2040) + PROJECT	
			Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Ivar & Project Driveway	TWSC	AM	13.8	B	14.2	B	11.8	B
		PM	15.4	C	16.0	C	16.4	C
Yucca & Driveway	TWSC	AM	11.0	B	11.6	B	11.8	B
		PM	9.3	A	9.9	A	10	B

TABLE 8B
SITE ACCESS - ALTERNATIVE 8
CMA ANALYSIS

INTERSECTION	CONTROL	PEAK HOUR	EXISTING + PROJECT		FUTURE (2027) + PROJECT		FUTURE (2040) + PROJECT	
			V/C	LOS	V/C	LOS	V/C	LOS
Argyle/James M. Nederlander Way Intersection	Signal	AM	0.248	A	0.331	A	0.343	A
		PM	0.578	A	0.839	D	0.869	D

TABLE 9
HOLLYWOOD CENTER
EXISTING YEAR (2018) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		EXISTING BASE	PROJECT TRIPS	EXISTING PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
1	Argyle Ave north of Dix St	1,971	80	2,051	3.9%	≥10.0%	NO
2	Vista Del Mar Ave north of Dix St	941	80	1,021	7.8%	≥12.0%	NO
3	Carmin Ave north of Franklin Ave	1,363	79	1,442	5.5%	≥12.0%	NO
4	Grace Ave south of Franklin Ave	1,117	26	1,143	2.3%	≥12.0%	NO
5	Wilcox Ave south of Franklin Ave	8,292	66	8,358	0.8%	≥8.0%	NO
6	Whitley Ave south of Franklin Ave	3,612	26	3,638	0.7%	≥8.0%	NO
7	Yucca St east of Whitley Ave	1,300	13	1,313	1.0%	≥12.0%	NO
8	Yucca St west of Wilcox Ave	2,755	13	2,768	0.5%	≥10.0%	NO
9	Vista Del Mar Ave south of Yucca St	392	0	392	0 Trips	120 Trips	NO
10	Yucca St east of Vista Del Mar	3,118	846	3,964	21.3%	≥8.0%	**YES**
11	Carlos Ave east of Vista Del Mar	946	0	946	0 Trips	120 Trips	NO
12	Whitley Ave north of Hollywood Blvd	3,464	79	3,543	2.2%	≥8.0%	NO
13	Hudson Ave north of Hollywood Blvd	1,872	26	1,898	1.4%	≥12.0%	NO
14	Wilcox Ave north of Hollywood Blvd	9,566	66	9,632	0.7%	≥8.0%	NO
15	Carlton Way east of Gower St	1,769	26	1,795	1.4%	≥12.0%	NO

TABLE 9
HOLLYWOOD CENTER
EXISTING YEAR (2018) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		EXISTING BASE	PROJECT TRIPS	EXISTING PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
16	De Longpre Ave west of Hudson Ave	4,603	0	4,603	0.0%	≥8.0%	NO
17	El Centro Ave north of Afton	3,808	272	4,080	6.7%	≥8.0%	NO

Notes:
[a] Uses City of Los Angeles evaluation criteria for residential street segments.

TABLE 10
HOLLYWOOD CENTER
FUTURE YEAR (2027) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		FUTURE BASE (2027)	PROJECT TRIPS	FUTURE PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
1	Argyle Ave north of Dix St	2,062	80	2,142	3.7%	≥10.0%	NO
2	Vista Del Mar Ave north of Dix St	975	80	1,055	7.6%	≥12.0%	NO
3	Carmin Ave north of Franklin Ave	1,412	79	1,491	5.3%	≥12.0%	NO
4	Grace Ave south of Franklin Ave	1,157	26	1,183	2.2%	≥12.0%	NO
5	Wilcox Ave south of Franklin Ave	9,555	66	9,621	0.7%	≥8.0%	NO
6	Whitley Ave south of Franklin Ave	3,742	26	3,768	0.7%	≥8.0%	NO
7	Yucca St east of Whitley Ave	1,347	13	1,360	1.0%	≥12.0%	NO
8	Yucca St west of Wilcox Ave	2,854	13	2,867	0.5%	≥10.0%	NO
9	Vista Del Mar Ave south of Yucca St	3,638	0	3,638	0.0%	≥8.0%	NO
10	Yucca St east of Vista Del Mar	5,606	846	6,452	13.1%	≥8.0%	**YES**
11	Carlos Ave east of Vista Del Mar	980	0	980	0.0%	120 Trips	NO
12	Whitley Ave north of Hollywood Blvd	6,930	79	7,009	1.1%	≥8.0%	NO
13	Hudson Ave north of Hollywood Blvd	1,939	26	1,965	1.3%	≥12.0%	NO
14	Wilcox Ave north of Hollywood Blvd	10,874	66	10,940	0.6%	≥8.0%	NO
15	Carlton Way east of Gower St	1,833	26	1,859	1.4%	≥12.0%	NO

TABLE 10
HOLLYWOOD CENTER
FUTURE YEAR (2027) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		FUTURE BASE (2027)	PROJECT TRIPS	FUTURE PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
16	De Longpre Ave west of Hudson Ave	5,479	0	5,479	0.0%	≥8.0%	NO
17	El Centro Ave north of Afton	6,399	272	6,671	4.1%	≥8.0%	NO

Notes:
[a] Uses City of Los Angeles evaluation criteria for residential street segments.

TABLE 11
HOLLYWOOD CENTER
FUTURE YEAR (2040) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		FUTURE BASE (2040)	PROJECT TRIPS	FUTURE PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
1	Argyle Ave north of Dix St	2,164	80	2,244	3.6%	≥10.0%	NO
2	Vista Del Mar Ave north of Dix St	1,024	80	1,104	7.2%	≥12.0%	NO
3	Carmin Ave north of Franklin Ave	1,483	79	1,562	5.1%	≥12.0%	NO
4	Grace Ave south of Franklin Ave	1,215	26	1,241	2.1%	≥12.0%	NO
5	Wilcox Ave south of Franklin Ave	9,986	66	10,052	0.7%	≥8.0%	NO
6	Whitley Ave south of Franklin Ave	3,930	26	3,956	0.7%	≥8.0%	NO
7	Yucca St east of Whitley Ave	1,414	13	1,427	0.9%	≥12.0%	NO
8	Yucca St west of Wilcox Ave	2,997	13	3,010	0.4%	≥8.0%	NO
9	Vista Del Mar Ave south of Yucca St	3,658	0	3,658	0.0%	≥8.0%	NO
10	Yucca St east of Vista Del Mar	5,768	846	6,614	12.8%	≥8.0%	**YES**
11	Carlos Ave east of Vista Del Mar	1,029	0	1,029	0.0%	≥12.0%	NO
12	Whitley Ave north of Hollywood Blvd	7,110	79	7,189	1.1%	≥8.0%	NO
13	Hudson Ave north of Hollywood Blvd	2,037	26	2,063	1.3%	≥10.0%	NO
14	Wilcox Ave north of Hollywood Blvd	11,372	66	11,438	0.6%	≥8.0%	NO
15	Carlton Way east of Gower St	1,925	26	1,951	1.3%	≥12.0%	NO

TABLE 11
HOLLYWOOD CENTER
FUTURE YEAR (2040) PLUS PROJECT NEIGHBORHOOD STREET ANALYSIS - ALTERNATIVE 8

NO.	STREET SEGMENT	WEEKDAY TWO-WAY DAILY VOLUME	WITH PROJECT ANALYSIS				
		FUTURE BASE (2040)	PROJECT TRIPS	FUTURE PLUS PROJECT	PROJECT INCREASE	EVALUATION CRITERIA [A]	EXCESSIVE BURDEN
16	De Longpre Ave west of Hudson Ave	5,718	0	5,718	0.0%	≥8.0%	NO
17	El Centro Ave north of Afton	6,597	272	6,869	4.0%	≥8.0%	NO

Notes:
[a] Uses City of Los Angeles evaluation criteria for residential street segments.

Attachment A - LADOT TAG Screening Responses, Review of Plans, Policies, Ordinances, and Procedures, and Hazards Analysis

LADOT TAG SCREENING EVALUATION – HOLLYWOOD CENTER ALTERNATIVE 8
(Based on LADOT TAG, July 2019)

Project: Hollywood Center – Alternative 8

Analyst: M. Nunez

Date: 7/30/2020

Screening Criteria	Screening Evaluation	Analysis Required?
2.1 CONFLICTING WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES		
If the project requires a discretionary action, and the answer is yes to any of the following questions, further analysis will be required to assess whether the proposed project would negatively affect existing pedestrian, bicycle, or transit facilities: 1. *Would the project generate a net increase of 250 or more daily vehicle trips?* 2. *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.)?* 3. *Is the project on a lot that is 0.5-acre or more in total gross area, or is the project's frontage along a street classified as an Avenue or Boulevard (as designated in the City'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 by the City's General Plan?*	1. *Yes* 2. *Yes* 3. *Yes*	Yes, See Alternative 8 Supplemental Analysis
2.2 CAUSING SUBSTANTIAL VEHICLE MILES TRAVELED		
If the project requires a 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 Threshold T-2.1, and a "no impact" determination can be made for that threshold: 1. *T-2.1-1: Would the land use project generate a net increase of 250 or more daily vehicle trips?*	1. *Yes* 2. *Yes* 3. *No*	Yes, See Alternative 8 Supplemental Analysis

2. T-2.1-2: Would the project generate a 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 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 vehicle miles traveled, as specified in Section 2.2.4.* *3. If the project includes retail uses, does the portion of the project that contain retail uses exceed a net 50,000 square feet?* *Independent of the above screening criteria, and the project requires a discretionary action, further analysis will be required if the following statement is true:* *4. Would the Project or Plan located within a one-half mile of a fixed-rail or fixed-guideway transit station replace an existing number of residential units with a smaller number of residential units?*	*4. No*	
2.3 SUBSTANTIALLY INDUCING ADDITIONAL AUTOMOBILE TRAVEL		
If the answer is no to the following question, further analysis will not be required for Threshold T-2.2, and a no impact determination can be made for that threshold: *1. T-2.2: Would the project include the addition of through traffic lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle (HOV) lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges (except managed lanes, transit lanes, and auxiliary lanes of less than one mile in length designed to improve roadway safety)?*	*1. No*	No
2.4 SUBSTANTIALLY INCREASING HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE		
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: 1. *Is the project proposing new driveways, or introducing new vehicle access to the property from the public right-of-way?* 2. *Is the project proposing to, or required to make any voluntary or required, modifications to the way (i.e., street dedications, reconfigurations of curb line, etc.)?*	1. *Yes* 2. *Yes*	Yes, See Alternative 8 Supplemental Analysis
3.2 PEDESTRIAN, BICYCLE, AND TRANSIT ACCESS ASSESSMENT		
If the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect existing pedestrian, bicycle, or transit facilities: 1. *Would the project generate a net increase of 250 or more daily vehicle trips?* 2. *Does the land use project include the construction, or addition of:* a. *50 dwelling units or guest rooms or combination thereof, or* b. *50,000 square feet of non-residential space?* 3. *Is the project on a lot that is ½ acre or more in total gross area, or is the project's frontage along 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 an Avenue or Boulevard (as designated in the City's General Plan)?*	1. *Yes* 2. *Yes* 3. *Yes*	Yes, See Transportation Analysis Report Chapter 4
3.3 PROJECT ACCESS, SAFETY, AND CIRCULATION EVALUATION		
Land Use Development Projects *For land use projects, if the answer is yes to all of the following questions, further analysis will be required to assess whether the project would negatively affect project access and circulation:* 1. *Does the land use project involve a discretionary action that would be under review by the Department of City Planning?* 2. *Would the land use project generate a net increase of 250 or more daily vehicle trips?* *Transportation Projects* *For transportation projects, if the answer is yes to the following question, further analysis will be required to assess how the project would affect project access, safety and circulation:*	1. *Yes* 2. *Yes*	Yes, See Alternative 8 Supplemental Analysis

3. *Does the transportation project reduce travel lane capacity on a road that would be expected to carry more than 750 vehicles per hour per lane for at least two (2) consecutive hours in a 24-hour period after the project is completed?*		
3.4 PROJECT CONSTRUCTION		
If the answer is yes to any of the following questions, further analysis will be required to assess if the project could negatively affect existing pedestrian, bicycle, transit, or vehicle circulation: 1. *Would a project that requires construction activities to take place within the right-of-way of a Boulevard or Avenue (as designated in the Mobility Plan 2035) which would necessitate temporary lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street?)* 2. *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)?* 3. *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?* 4. *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?* 5. *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?*	1. *Yes* 2. *Yes* 3. *Yes* 4. *Yes* 5. *No*	Yes, See Transportation Analysis Report Chapter 4
3.5 RESIDENTIAL STREET CUT-THROUGH ANALYSIS		
Land Use Development Projects		

If the answer is yes to all of the following questions, further analysis may be required to assess whether the project would negatively affect residential streets: 1. *Would the project generate a net increase of 250 or more daily vehicle trips?* 2. *Does the land use project include a discretionary action that would be under review by the Department of City Planning?* *In addition, for development projects, when selecting residential street segments for analyses during the transportation assessment scoping process, all of the following conditions must be present:* • *The project is located along a currently congested Boulevard or Avenue and adds trips that may lead to trip diversion to parallel routes along residential Local Streets. The congestion level of the Boulevard or Avenue can be determined based on the estimated peak hour LOS under project conditions of the study intersection(s) (as determined in Section 3.3). LOS E and F are considered to represent congested conditions;* • *The project is projected to add a substantial amount of automobile traffic to the congested Boulevard(s), Avenue(s), or Collector(s) that could potentially cause a shift to alternative route(s); and* • *Nearby local residential street(s) (defined as Local streets as designated in the City's General Plan passing through a residential neighborhood) provide motorists with a viable alternative route. A viable alternative route is defined as one which is parallel and reasonably adjacent to the primary route as to make it attractive as an alternative to the primary route. LADOT has discretion to define which routes are viable alternative routes, based on, but not limited to, features such as geography and presence of existing traffic control devices, etc.* <u>*Transportation Projects*</u> *For transportation projects, if the answer is yes to the following question, further analysis may be required to assess whether the project would negatively affect project access and circulation:* 3. *Does the transportation project reduce travel lane capacity on a road that would be expected to carry more than 750 vehicles per*	1. *Yes* 2. *Yes* • *Yes* • *No* • *Yes*	Yes, See Alternative 8 Supplemental Analysis

hour per lane for at least two (2) consecutive hours in a 24-hour period after the project is completed? *In addition, for transportation projects, when selecting residential street segments for analyses during the transportation assessment study scoping process, all of the following conditions must be present:* • *The transportation project will reduce automobile capacity on a Boulevard, Avenue, or Collector (as designated in the City's General Plan) such that motorists traveling on the Boulevard, Avenue, or Collector may opt to divert to a parallel route through a Local Street,* • *The project is projected to cause a shift of a substantial amount of traffic to alternative route(s), and* • *Nearby local residential street(s) (defined as Local streets as designated in the City's General Plan residential neighborhood) provide motorists with a viable alternative route. A viable alternative route is defined as one which is parallel and reasonably adjacent to the primary route as to make it attractive as an alternative to the primary route. LADOT has discretion to define which routes are viable alternative routes, based on, but not limited to, features such as geography and presence of existing traffic control devices, etc.*		

ATTACHMENT A - CEQA ANALYSIS OF TRANSPORTATION IMPACTS PER CITY OF LOS ANGELES TRANSPORTATION ASSESSMENT GUIDELINES – HOLLYWOOD CENTER ALTERNATIVE 8 SUPPLEMENTAL ANALYSIS

2.1 CONFLICTING WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

Table 2.1-2: Questions to Determine Project Applicability to Plans, Policies and Programs

#	Guiding Questions	Relevant Plans, Policies, and Programs	Supporting/Complementary City Plans, Policies, and Programs to Consult	"Yes" or "No" + Source
EXISTING PLAN APPLICABILITY				
1	Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? (screening question)	LAMC Section 12.37		Alternative 8 includes construction along Vine Street, which is designated as an Avenue II and the zoning is Regional Center Commercial.
2	Is project site along any network identified in the City's Mobility Plan?	MP 2.3 through 2.7		Yes, see list for Project Site frontages along networks identified in the City's Mobility Plan. • Vine Street: Pedestrian Enhanced District, Bike Lane Network. • Yucca Street: Bicycle Lane Network. Source: Mobility Plan 2035 (Pages 134-149)

3	Are dedications or improvements needed to serve long-term mobility needs identified in the Mobility Plan 2035?	MP – Street Classifications; MP – Street Designations and Standard Roadway Dimensions	MP - 2.17 Street Widenings	No additional improvements are needed to serve long-term mobility needs identified in the Mobility Plan 2035 as street cross-sections are compliant with designations and configurations in Mobility Plan 2035 and City of LA Complete Streets Design Guide: • Vine Street: Avenue II • Yucca Street: (West of Vine) Avenue II • Ivar Avenue: Local Street • Argyle Avenue: Local Street • Yucca (East of Vine) Local Street Source: City of Los Angeles Complete Streets Design Guide (Avenue designations page 47-49 and Local Streets designation page 50.), NavigateLA.lacity.org
4	Does the project require placement of transit furniture in accordance with City's Coordinated Street Furniture and Bus Bench Program?			No

5	Is project site in an identified Transit Oriented Community (TOC)?	MP - TEN; MP - PED; MP - BEN; TOC Guidelines		Yes, the Project Site frontages are in TOC Tier 4. Source: ZIMAS (Planning and Zoning: Transit Oriented Community)
6	Is project site on a roadway identified in City's High Injury Network?	Vision Zero	Mobility Plan 2035	Yes, see list for Project Site frontage streets on City's High Injury Network. • Yucca Street (between Ivar Avenue and Argyle Avenue) • Ivar Avenue (at the intersection of Ivar Avenue and Yucca Street) • Vine Street (between Yucca Street and Hollywood Boulevard) Source: City's High Injury Network located in geohub.lacity.org
7	Does project propose repurposing existing curb space? (Bike corral, car-sharing, parklet, electric vehicle charging, loading zone, curb extension, etc.)	MP - 2.1 Adaptive Reuse of Streets; MP - 2.10 Loading Areas; MP - 3.5 Multi-Modal Features; MP - 3.8 Bicycle Parking; MP - 4.13 Parking and Land Use Management; MP -	MP - 2.3 Pedestrian Infrastructure; MP - 2.4 Neighborhood Enhanced Network; MP - 3.2 People with Disabilities; MP - 4.1 New Technologies; MP 5.1 Sustainable Transportation; MP - 5.5 Green Streets	No. Loading zone and vehicle charging will be provided on-site.

		5.4 Clean Fuels and Vehicles		
8	Does project propose narrowing or shifting existing sidewalk placement?	MP 2.3 Pedestrian Infrastructure; MP 3.1 - Access for All; MP -PED; MP - ENG 19; MP 2.17 Street Widenings	Healthy LA; Vision Zero; Sustainability Plan	No
9	Does project propose paving, narrowing, shifting or removing an existing parkway?	MP - 5.5 Green Streets; Sustainability pLAn		No
10	Does project propose modifying, removing or otherwise affect existing bicycle infrastructure? (ex: driveway proposed along street with bicycle facility)	MP - BEN; MP - 4.15 Public Hearing Process	Vision Zero	No. No new driveways proposed on Yucca or Vine, both of which have a bike route.
11	Is project site adjacent to an alley? If yes, will project make use of, modify, or restrict alley access?	MP - 3.9 Increased Network Access; MP - ENG.9; MP - PL.1; MP - PL.13; MP - PS.3		Yes, the Project Site is adjacent to an alley between Vine Street and Argyle Avenue. Alternative 8 will use alley access for loading.
12	Does project create a cul-de-sac or is project site located adjacent to existing cul-de-sac? If yes, is cul-de-sac consistent with design goal in Mobility Plan 2035 (maintain through bicycle and pedestrian access)?	MP - 3.10 Cul-de-sacs		No
ACCESS: DRIVEWAYS AND LOADING				
13	Does project site introduce a new driveway or loading access along an arterial (Avenue or Boulevard)?	MP – PL.1; MP – PK.10, CDG 4.1.02	Vision Zero	No
14	If yes to 13, Is a non-arterial frontage or alley access available to serve the driveway or loading access needs?	MP - PL.1; MPP 321	Vision Zero	N/A

15	Does project site include a corner lot? (avoid driveways too close to intersections)	CDG 4.1.01		Yes, see list for Project Site frontages streets that include a corner lot: • South East corner of Ivar Avenue and Yucca Street • South East corner of Vine Street and Yucca Street
16	Does project propose driveway width in excess of City standard?	MPP Sec. 321	Vision Zero, Sustainability pLAn, MP - PED, MP -BEN CDG 4.1.04	No
17	Does project propose more driveways than required by City maximum standard?	MPP - Sec No. 321 Driveway Design	Vision Zero, MP, Healthy LA	No
18	Are loading zones proposed as a part of the project?	MP - 2.10 Loading Areas; MP - PK.1; MP - PK.7; MP – PK.8; MPP 321		Yes
19	Does project include "drop-off" zones or areas? If yes, are such areas located to the side or rear of the building?	MP - 2.10 Loading Areas		Yes, drop-off zones are provided internal to the site via driveways and a circular vehicle “turnaround” area with a loading zone.
20	Does project propose modifying, limiting/restricting, or removing public access to a public right-of-way (e.g., vacating public right-of-way?)	MP - 2.3 Pedestrian Infrastructure; MP - 3.9 Increased Network Access		Yes

DETAILED RESPONSES IN SUPPORT OF DETERMINING PLANS, PROGRAMS, ORDINANCES, OR POLICIES APPLICABILITY FOR HOLLYWOOD CENTER ALTERNATIVE 8 SUPPLEMENTAL ANALYSIS (ADAPTED FROM TABLE 2.1-2 IN TRANSPORTATION ANALYSIS GUIDELINES, LADOT, JULY 2019)

1. Based on review of LAMC section 12.37 no dedication is required as adjacent highways and collectors are compliant with the widths and/or cross-sections as shown in the City's Mobility Plan 2035. Vine Avenue is an Avenue II and the roadway cross-section includes two travel lanes in each direction, a center median turn lane, and parking on both sides of the street. The land use designation is Regional Center Commercial.
2. In addition to complying with the Avenue II cross-section, the existing width on Vine allows for modifications consistent with Vine Avenue's designation as part of the Bike Lane Network and Pedestrian Enhanced District. Page 47 of the Mobility Element's Design Guidelines identify several cross-sections that would fit within the existing right-of-way and that would not be conflicted with or precluded by approval of Alternative 8. Similarly, Yucca Street is compliant with the cross-section for a local street and would not preclude the installation of bike lanes with modifications to the cross-section.
    a. MP 2.3 Pedestrian Infrastructure: A pedestrian paseo and a proposed signalized crossing across Argyle Avenue are intended to facilitate pedestrian connectivity and align with existing mid-block crosswalks on Vine Street and Ivar Avenue. Alternative 8 does not propose to narrow sidewalks or remove streetscape amenities or features. Alternative 8's pedestrian features would integrate into and with the adjacent pedestrian network to maintain connections with multimodal facilities. Furthermore, Alternative 8 has been specifically designed to avoid disruption to the Hollywood Walk of Fame by eliminating driveway and vehicular access from Vine Street, including the removal of seven existing curb cuts.
    b. MP 2.4 Neighborhood Enhanced Network: Segments of Cahuenga Boulevard, Argyle Avenue, Yucca Street, Gower Street, and Carlos Avenue are part of the City's NEN. These are streets that can provide comfortable and safe routes for slower modes such as walking, bicycling, and other means of travel. Enhancements on these streets are intended to provide a more comfortable experience for users of slow modes by achieving target vehicle speeds and volumes that complement slower modes of travel. Alternative 8 is not proposing any changes along these streets that would prevent the City from installing additional features as part of the NEN, nor does Alternative 8 propose to modify these streets in a way that would substantially increase travel speeds on these roadways.

c. MP 2.5 Transit Network: Alternative 8 does not propose to remove or modify transit facilities in a manner that would negatively impact the reliability of existing or future bus service. Additionally, the traffic analysis report includes a discussion of the Transit Enhanced Network (TEN) and Alternative 8 would not preclude or limit the City from implementation of the TEN on locally designated corridors.
d. MP 2.6 Bicycle Networks: Consistent with LAMC Section 12.21 A.16, Project Alternative 8 would provide at least 526 bicycle parking spaces, as well as bike lockers and showers located in the subterranean bike parking areas in dedicated areas on the respective sites. A bicycle repair facility would also be provided on the Project Site as part of the amenities to increase access for bicycle users. Bicyclists would have the same access opportunities to the Project Site as pedestrians. Further, Vine Street and Yucca Street (east of Vine Street) are designated as Tier 2 bicycle facilities. Project development would not preclude development of bike lanes along these streets, and thus, Alternative 8 would not conflict with the bicycle lane network envisioned in Mobility Plan 2035.
e. MP 2.7 Vehicle Network: All existing roadways adjacent to the Project Site, including Yucca Street, Argyle Avenue, Ivar Avenue, and Vine Street would continue to provide access to the regional freeway system, particularly US-101 located less than 400 feet north of the Project Site, similar to existing conditions. Alternative 8 would also not conflict with the street designations and classifications for the adjacent roadways as identified in Mobility Plan 2035. Adjacent streets will retain their designation, including Vine Street with the installation of the landscaped median.

3. No additional improvements are needed to serve long-term mobility needs identified in the Mobility Plan 2035 as street cross-sections are compliant with designations and configurations in Mobility Plan 2035 and City of LA Complete Streets Design Guide:
    - Vine Street: matches designation for Avenue II as described above, does not preclude installation of corridor options presented for Avenue II
    - Yucca Street west of Vine is designated as an Avenue II. Like Vine Avenue, this section of Yucca St has a width of 68 feet and can accommodate the typical Avenue II designation shown. This segment currently allows diagonal parking on the south side, resulting in a modified cross-section. Based on the available right-of-way and street designation, Alternative 8 will not conflict or preclude the City from making changes to the roadway per the Avenue II options in Mobility Plan 2035.
    - Ivar Avenue, Argyle Avenue, and Yucca Street (east of Vine) are all designated as Local Streets with a roadway width of 36 feet with two travel lanes and parking. The cross-sections are compliant and Alternative 8 would not conflict with long-term needs identified in Mobility Plan 2035.
    - Argyle Avenue: Local Street
    - Yucca (east of Vine) Local Street

- MP 2.17 Street Widenings: Alternative 8 is not proposing to widen any streets.

4. Alternative 8 does not require placement of street furniture.
5. The TOC guidelines define parameters of housing incentives based on considerations such as proximity to high-quality transit, type of housing, and the land uses being replaced. The location of the Project Site qualifies as Tier 4 based on proximity to the Hollywood Vine Red Lin Station and the intersecting Metro 780 Rapid Bus that travels along Hollywood Boulevard. The Transportation Analysis Report includes a discussion of streets in the study area that are part of the Transit Enhanced Network (TEN), Pedestrian Enhanced Districts (PED), and Bicycle Enhanced Network (BEN). Alternative 8 does not propose any modifications to the public right-of-way that would preclude or limit the City's ability to implement improvements associated with the TEN, PED, or BEN.
6. Several street frontages are located on the High Injury Network (HIN), including segments of Yucca Street, Ivar Avenue, and Vine Street. According to the latest projects listed for Vision Zero, there would not be a conflict, nor would Alternative 8 preclude actions the City would like to take:
    a. Yucca Street bicycle boulevard is planned and this Project will not conflict or preclude
    b. Specific projects have not been identified for Ivar Avenue or Vine Street. Vision Zero projects emphasize enhancing the environment for the most vulnerable road users. Alternative 8 will be upgrading sidewalks and providing a signalized crossing across Argyle without narrowing sidewalks or removing pedestrian amenities. Alternative 8 would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way.
7. MP 2035 considers ways to balance the needs of various users and trip purposes through a multimodal transportation network that includes features such as loading areas, multi-modal features, electric vehicle charging areas, and bike or car sharing. This Project conforms to relevant MP 2035 polices regarding adjacent curb space in the following ways:
    a. 2.1 Adaptive Reuse of Streets: urban streets are ecosystems with many complex interactions that not only include travel, but also play a role in providing other roles such as landscaping and drainage. This 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.
    b. 2.3 Pedestrian Infrastructure: MP 2035 identifies Pedestrian Enhanced Districts where initial analysis suggests arterials can be improved and further analysis and prioritization will occur as funding and projects become available. Alternative 8 will be enhancing adjacent pedestrian infrastructure and will not narrow or remove pedestrian facilities.
    c. 2.4 Neighborhood Enhanced Network: Segments of Cahuenga Boulevard, Argyle Avenue, Yucca Street, Gower Street, and Carlos Avenue are part of the City's NEN. These are streets that can provide comfortable and safe routes for slower modes

such as walking, bicycling, and other means of travel. Enhancements on these streets are intended to provide a more comfortable experience for users of slow modes by achieving target vehicle speeds and volumes that complement slower modes of travel. Alternative 8 is not proposing any changes along these streets that would prevent the City from installing additional features as part of the NEN, nor does Alternative 8 propose to modify these streets in a way that would substantially increase travel speeds on these roadways.

d. 2.10 Loading Areas: when designing developments it is important to consider a loading area that minimally impacts other travelers such as people driving or walking. Alternative 8 proposes on-site loading areas and reduces the overall number of curb cuts relative to the number serving the site today, reducing conflicts with other roadway users. The West Site would have a designated commercial loading area off a separate driveway from Ivar Avenue, while the East Site would have a commercial loading area accessed from the public alley accessed from Argyle Avenue. The East Site loading area for Alternative 8 would be located at the west end of the alley and would be designed to provide room for two delivery trucks within the loading area. Additionally, a turnaround area would be provided which would allow vehicles to pull forward into the alley, use the turnaround area to back into the loading dock, and then pull forward out of the alley. The turnaround area would be used by delivery vehicles and trash trucks servicing both Alternative 8 Alternative 8 and the adjacent Pantages Theater.
e. 3.2 People with Disabilities: Modifications to the public right-of-way are required to provide ADA accommodations for accessibility. Alternative 8 will enhance east-west connectivity by providing a signalized marked crossing with a curb cut to facilitate access across Argyle Avenue that aligns with the proposed paseos and existing marked midblock crossings on Vine Street and Ivar Avenue. The proposed Project would not inhibit sidewalk areas or create any obstructions to limit or inconvenience the mobility of travelers with disabilities along the public right-of-way.
f. 3.5 Multi-Modal Features: depending on the local context, various multimodal features may be considered to encourage walking and/or assist in making first/last mile connections with transit. The Project Site will include bike parking, upgrades to adjacent sidewalks and crossings, improving first/last mile access to nearby transit, including the Metro Red Line. From a bicycle parking perspective, Alternative 8 will provide short and long-term parking, exceeding the code requirements for both. Project Alternative 8 is required to provide 465 total bicycle parking spaces and proposes to provide a total of 526, or 13% more than required.
g. 3.8 Bicycle Parking: Alternative 8 is providing on-site bicycle parking consistent with the City's Bicycle Parking Ordinance. Alternative 8 will provide short and

long-term parking, exceeding the code requirements for both. Project Alternative 8 is required to provide 465 total bicycle parking spaces and proposes to provide a total of 526, or 13% more than required.

h. 4.1 New Technologies: Alternative 8 does not propose elements that would limit or preclude the City's ability to offer or introduce technology systems or infrastructure. Alternative 8's TDM program includes sharing information about commute options and trip planning, while the site design offers loading areas for ridesharing services that leverage technology options and expand access to transportation choices.

i. 4.13 Parking and Land Use Management: excessive parking can incentivize undesirable behavior or result in large areas of vacant land that make it harder to reach destinations without a vehicle. Alternative 8 is providing ground floor and subterranean parking that will be appropriately sized for the development and designed so as not to negatively impact the visual quality of the development. Per LAMC Section 12.21A Alternative 8 would be required to provide 2,044 parking spaces and proposes to provide a total of 2,237. Alternative 8 will slightly exceed the parking requirement by 9.4%. Since parking is not an impact under CEQA and the proposed parking supply is slightly higher than code, Alternative 8 is considered to be compliant with the municipal code and MP 4.13.

j. 5.4 Clean Fuels and Vehicles: reducing emissions can be achieved through driving fewer miles and/or using clean fuels. Alternative 8 will provide on-site vehicle charging for 10% of vehicle parking supply.

k. 5.5 Green Streets: This Project will not modify or remove any existing green infrastructure and would not preclude City green street projects in the future.

8. Alternative 8 does not propose to shift or narrow sidewalks. Adjacent pedestrian facilities will be enhanced, such as sidewalks, the installation of a midblock signalized crossing, and bike parking such that Alternative 8 would be supportive of and not preclude or conflict with MP 2035 Policies such as:

    a. 2.3 Pedestrian Infrastructure: Alternative 8 will enhance the crossing of Argyle Avenue with a signalized crossing and will not narrow or remove pedestrian facilities adjacent to Alternative 8.

    b. 3.1 Access for All: MP 2035 emphasizes the importance of multimodal networks as integral components of the City's transportation system. Alternative 8's location and design are intended to leverage proximity to the Red Line and the walkable environment and numerous destinations proximate to the Project Site that can be accessed through a variety of modes. Alternative 8's design is providing vehicle parking, bicycle parking, continuous pedestrian access, and on-site loading areas for passenger loading and deliveries.

    c. MP PEDs: Pedestrian Enhanced Districts identify areas where pedestrian improvements on streets could be prioritized to provide better walking conditions to major destinations within communities. Alternative 8 is surrounded

by streets that are within PEDs and Alternative 8 will not preclude enhancements to the streets or public right-of-way that the City may pursue.

d. MP ENG.19: This MP2035 program discusses first/last mile improvements near transit stops that could include measures such as landscaping, lighting, signage, and midblock crosswalks, among other options. Alternative 8 will contribute to first/last mile enhancements by consolidating driveways on Vine Street to reduce vehicle/pedestrian conflicts on this route to the Red Line, and also by providing a midblock crossing across Argyle Avenue.
e. MP 2.17 Street Widenings: Street widenings should be carefully considered as they can impact the cost, character, safety, and environment of a street segment. Alternative 8 is not proposing to widen any streets.
f. Healthy LA: From a transportation perspective, Alternative 8 will support the goals in Healthy LA. The proposed Project is designed and located in an area that facilitates travel on foot, transit, and bicycle. Proximity to the Red Line and a mix of residential and retail uses will allow people to travel for business and leisure in a way that provides greater options and reduces dependence on single occupant vehicles. Alternative 8 would not conflict with, limit, or preclude the City's ability to implement programs and policies in furtherance of Healthy LA.
g. Sustainability pLAn: From a transportation perspective, Alternative 8 will support the goals in Sustainability Plan 2019. The proposed Project is designed and located in an area that facilitates travel on foot, transit, and bicycle. Proximity to the Red Line and a mix of residential and retail uses will allow people to travel for business and leisure in a way that provides greater options and reduces dependence on single occupant vehicles. Alternative 8 would not conflict with, limit, or preclude the City's ability to implement programs and policies in furtherance of Sustainability Plan 2019.

9. MP 2035 includes Policy 5.5 for Green Streets and this Project will not modify or remove any existing green infrastructure and would not preclude City green street projects in the future.
    a. Sustainability pLAn: From a transportation perspective, Alternative 8 will support the goals in Sustainability Plan 2019. The proposed Project is designed and located in an area that facilitates travel on foot, transit, and bicycle. Proximity to the Red Line and a mix of residential and retail uses will allow people to travel for business and leisure in a way that provides greater options and reduces dependence on single occupant vehicles. Alternative 8 would not conflict with, limit, or preclude the City's ability to implement programs and policies in furtherance of Sustainability Plan 2019.
10. Alternative 8 proposes to provide on-site bicycle parking and amenities while preserving the City's ability to implement bicycle projects on adjacent streets that are part of the bikeway network, such as Yucca Street and Vine Street. Alternative 8 will not be adding

any driveways to streets with bikeways and will reduce driveways on Vine Street, therefore not conflicting with the City's policies regarding bicycle facilities or the BEN.

a. MP 4.15 Public Hearing Process: This Project will not be removing bicycle facilities and would not entail any public hearings for the removal of such facilities.
b. Vision Zero: Several street frontages are located on the High Injury Network (HIN), including segments of Yucca Street, Ivar Avenue, and Vine Street. According to the latest projects listed for Vision Zero, there would not be a conflict, nor would Alternative 8 preclude actions the City would like to take:
    i. Yucca Street bicycle boulevard is planned and this Project will not conflict or preclude the City from implementing this project.
    ii. Specific projects have not been identified for Ivar Avenue or Vine Street. Vision Zero projects emphasize enhancing the environment for the most vulnerable road users. Alternative 8 will be upgrading sidewalks and providing a signalized crossing across Argyle without narrowing sidewalks or removing pedestrian amenities. Alternative 8 would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way.

11. There are currently 11 driveways surrounding the site and the proposed Project will consolidate that number to a total of five driveways. One of the driveways is an alley that takes assess from Argyle Avenue and the alley extends halfway across the block before ending at the adjacent property, which is part of the proposed Project. Alternative 8 will provide and enhance east-west access and does propose a partial alley vacation to utilize the alley for service access to the East Site. There are several relevant polices from MP 2035 that were reviewed for conflicts:
    a. 3.9 Increased Network Access: This policy focuses on maintaining network access through strategies such as smaller block sizes to facilitate connectivity for travelers in the area. This policy discourages the vacation of public rights-of-way on the basis that these types of changes may limit connectivity by increasing block sizes and removing previously accessible travel routes for multimodal activity. The alley provides east-west access from Argyle Avenue to Vine Street and currently lacks sidewalks or infrastructure that serves multi-modal connections. Alternative 8 proposes to include a landscaped pedestrian paseo that will connect Argyle Avenue and Vine Street via the Project Site, within approximately 100 feet of the existing alley. Alternative 8 is proposing partial vacation of the alley and Alternative 8 is including design features to provide an enhanced east-west connection, thus complying with this policy.
    b. EN.9: This refers to MP2035's green alleys program which encourages stormwater features that improve the quality of alleys. Alternative 8 would not preclude the City from adding green elements to the public right-of-way.
    c. PL.1: This policy encourages driveway access from non-arterial streets. Alternative 8 is consistent with this policy as driveways are located on Ivar

Avenue, Yucca Street, and the public alley accessed from Argyle Avenue, while avoiding Vine Street.

d. PL.13: This policy encourages the use of alternative materials at alleys and the proposed Project does not conflict or preclude such actions by the City in the alley.
e. PS.3: This policy discusses pedestrian loops and exploring options in the public right-of-way to provide a connected network that uses public and private spaces. Alternative 8 is consistent with this policy and will aid in providing a walkable pedestrian loop by providing a landscaped east-west connection from Ivar Avenue, across Alternative 8, Vine Street, and Argyle Avenue with a midblock crossing. This connection will enhance pedestrian connectivity and will connect to other public spaces, such as sidewalks, for pedestrian connectivity.

Alternative 8 is requesting partial vacation of the alley and Alternative 8's design features are compliant as they offer improvements to east-west connectivity that facilitates multi-modal activity in the study area.

12. Alternative 8 does not create a cul-de-sac.
13. Alternative 8 does not propose to introduce a new driveway or loading access along an Avenue or Boulevard. Instead Alternative 8 proposes to remove driveways on Vine Street, which is designated as an Avenue II.
    a. MP 2035 polices PL.1 and PK.10 encourage vehicular access from non-arterial streets (or alleys) and incentives for redesigning access points to be more pedestrian friendly. This Project does not create any conflicts with the polices regarding access as Alternative 8 takes access from non-arterial streets and is proposing to enhance the Argyle Avenue access point to complete the continuous east-west pedestrian access that connects Ivar Avenue to Argyle Avenue.
    b. Vision Zero: Several street frontages are located on the High Injury Network (HIN), including segments of Yucca Street, Ivar Avenue, and Vine Street. According to the latest projects listed for Vision Zero, there would not be a conflict, nor would Alternative 8 preclude actions the City would like to take:
        i. Yucca Street bicycle boulevard is planned and this Project will not conflict or preclude the City from implementing this project.
        ii. Specific projects have not been identified for Ivar Avenue or Vine Street. Vision Zero projects emphasize enhancing the environment for the most vulnerable road users. Alternative 8 will be upgrading sidewalks and providing a signalized crossing across Argyle without narrowing sidewalks or removing pedestrian amenities. Alternative 8 would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way.
14. N/A. The answer to number 13 is no, Alternative 8 does not introduce a new driveway or loading access along an arterial.

15. Alternative 8 includes property at the northwest corner of Ivar Avenue & Yucca Street and the northwest corner of Vine Street & Yucca Street. The northwest corner of Vine Street & Yucca Street will not be changed and the Gogerty Building will remain, screening parking and providing windows and doors at the ground level, and preserving the Walk of Fame on this section of Vine Street. The northwest corner of Ivar Avenue & Yucca Street will also include building frontages that screen parking. The service access driveway is proposed approximately 80 feet from the corner. MPP 321 on the design of driveways states that on a collector or local street, such as Ivar Avenue, driveways should not be placed within 75 feet of the adjacent street (for a project with frontage greater than 250 feet)
16. Project driveways are proposed at 24 feet and 27 feet on Ivar Avenue and 38 feet for the Argyle Avenue access point. MPP 321 recommends a driveway width of 30 feet for commercial developments and multi-family residential developments with more than 25 parking spaces, but the policy also states that wider driveway widths may be appropriate for multiple lanes. The alley adjacent to the East Site is 20 feet wide and will be widened to 24 feet by Alternative 8.
    a. Vision Zero: Several street frontages are located on the High Injury Network (HIN), including segments of Yucca Street, Ivar Avenue, and Vine Street. According to the latest projects listed for Vision Zero, there would not be a conflict, nor would Alternative 8 preclude actions the City would like to take:
        i. Yucca Street bicycle boulevard is planned and this Project will not conflict or preclude the City from implementing this project.
        ii. Specific projects have not been identified for Ivar Avenue or Vine Street. Vision Zero projects emphasize enhancing the environment for the most vulnerable road users. Alternative 8 will be upgrading sidewalks and providing a signalized crossing across Argyle without narrowing sidewalks or removing pedestrian amenities. Alternative 8 would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way.
    b. Sustainability pLAn: From a transportation perspective, Alternative 8 will support the goals in Sustainability Plan 2019. The proposed Project is designed and located in an area that facilitates travel on foot, transit, and bicycle. Proximity to the Red Line and a mix of residential and retail uses will allow people to travel for business and leisure in a way that provides greater options and reduces dependence on single occupant vehicles. Alternative 8 would not conflict with, limit, or preclude the City's ability to implement programs and policies in furtherance of Sustainability Plan 2019.
    c. MP PED; MP BEN: The Transportation Analysis Report includes a discussion of streets in the study area that are part of the Pedestrian Enhanced Districts (PED) and Bicycle Enhanced Network (BEN). Alternative 8 does not propose any

modifications to the public right-of-way that would preclude or limit the City's ability to implement improvements associated with the PED or BEN.

17. MPP 321 allows up to two driveways for up to 400 feet of frontage and one driveway for each additional 400 feet of frontage. The East and West Site both meet the minimum frontage requirements for two driveways which have been located on Ivar Avenue and Argyle Avenue, consistent with polices described above that seek to avoid driveways on arterial corridors.
    a. Vision Zero: Several street frontages are located on the High Injury Network (HIN), including segments of Yucca Street, Ivar Avenue, and Vine Street. According to the latest projects listed for Vision Zero, there would not be a conflict, nor would Alternative 8 preclude actions the City would like to take:
        i. Yucca Street bicycle boulevard is planned and this Project will not conflict or preclude the City from implementing this project.
        ii. Specific projects have not been identified for Ivar Avenue or Vine Street. Vision Zero projects emphasize enhancing the environment for the most vulnerable road users. Alternative 8 will be upgrading sidewalks and providing a signalized crossing across Argyle without narrowing sidewalks or removing pedestrian amenities. Alternative 8 would not preclude or conflict with the implementation of future Vision Zero projects in the public right-of-way.
    b. Healthy LA: From a transportation perspective, Alternative 8 will support the goals in Healthy LA. The proposed Project is designed and located in an area that facilitates travel on foot, transit, and bicycle. Proximity to the Red Line and a mix of residential and retail uses will allow people to travel for business and leisure in a way that provides greater options and reduces dependence on single occupant vehicles. Alternative 8 would not conflict with, limit, or preclude the City's ability to implement programs and policies in furtherance of Healthy LA.
18. Loading zones are proposed as part of Alternative 8. Alternative 8 proposes to include passenger and commercial loading areas that are interior to the site, thereby providing adequate loading areas and designing in a manner that minimizes conflicts with vehicles and pedestrians.
    a. MP 2.10 Loading Areas: when designing developments it is important to consider a loading area that minimally impacts other travelers such as people driving or walking. Alternative 8 proposes on-site loading areas and reduces the overall number of curb cuts relative to the number serving the site today, reducing conflicts with other roadway users. The West Site would have a designated commercial loading area off a separate driveway from Ivar Avenue, while the East Site would have a commercial loading area accessed from the public alley accessed from Argyle Avenue. The East Site loading area for Alternative 8 would be located at the west end of the alley and would be designed to provide room for two delivery trucks within the loading area. Additionally, a turnaround area

would be provided which would allow vehicles to pull forward into the alley, use the turnaround area to back into the loading dock, and then pull forward out of the alley. The turnaround area would be used by delivery vehicles and trash trucks servicing both Project Alternative 8 and the adjacent Pantages Theater.

b. MP PK.1 is about creative parking solutions and implementing creative strategies to address parking conflicts in areas with high parking demand. Alternative 8 will help to address parking conflicts by designing the access points to provide pick-up/drop-off areas that are internal to the site for visitors and rideshare services. This way those visitors will not occupy curb parking spaces in the area and allow long-term parkers to utilize them.

c. MP PK.7 discusses off-street loading and is program that encourages the designation of off-street dock and/or loading facilities for non-residential buildings. The proposed Project includes proposed off-street loading areas for commercial loading and back-of-house functions. Additionally, Alternative 8 provides areas for off-street loading that also accommodate visitors and rideshare services, as described above.

d. MP PK.8 encourages on-street loading through removal of parking in established industrial areas where off-street loading facilities are lacking. Alternative 8 is not located in an industrial area and does not include the designation of on-street loading areas.

19. Alternative 8 includes drop-off areas that are proposed to be located internal to the site, such that there is adequate space for loading and the loading activity potential conflict with pedestrian and vehicular movements are minimized.

    a. MP 2.10 Loading Areas: when designing developments it is important to consider a loading area that minimally impacts other travelers such as people driving or walking. Alternative 8 proposes on-site loading areas and reduces the overall number of curb cuts relative to the number serving the site today, reducing conflicts with other roadway users. The West Site would have a designated commercial loading area off a separate driveway from Ivar Avenue, while the East Site would have a commercial loading area accessed from the public alley accessed from Argyle Avenue.

20. Alternative 8 does not propose to remove or restrict access to a public right-of-way. Instead it will create enhanced connections by connecting Ivar Avenue, Vine Street, and Argyle Avenue through pedestrian paseos and marked midblock crossings. Currently doing this requires traversing private parking lots and Alternative 8 design will create and enhance this connection through the proposed site design.

    a. MP 2.3 Pedestrian Infrastructure: A pedestrian paseo and a proposed signalized crossing across Argyle Avenue are intended to facilitate pedestrian connectivity and align with existing mid-block crosswalks on Vine Street and Ivar Avenue. Alternative 8 does not propose to narrow sidewalks or remove streetscape amenities or features. Alternative 8's pedestrian features would integrate into

and with the adjacent pedestrian network to maintain connections with multimodal facilities. Furthermore, Alternative 8 has been specifically designed to avoid disruption to the Hollywood Walk of Fame by eliminating driveway and vehicular access from Vine Street, including the removal of seven existing curb cuts. These changes would help restore continuity to the Hollywood Walk of Fame while reducing vehicle/pedestrian conflicts.

b. MP 3.9 Increased Network Access: This policy focuses on maintaining network access through strategies, such as smaller block sizes to facilitate connectivity for travelers in the area. This policy discourages the vacation of public rights-of-way on the basis that these types of changes may limit connectivity by increasing block sizes and removing previously accessible travel routes for multimodal activity. The alley on the East Site provides east-west access from Argyle Avenue to Vine Street and currently lacks sidewalks or infrastructure that serves multi-modal connections. Alternative 8 proposes to include a landscaped pedestrian paseo that would connect Argyle Avenue and Vine Street via Alternative 8 Site, within approximately 100 feet of the existing alley. Alternative 8 is proposing partial vacation of the alley, and Alternative 8 is including design features to provide an enhanced east-west connection, thus not conflicting with this policy.

   Generally, Alternative 8 would create enhanced connections by connecting Ivar Avenue, Vine Street, and Argyle Avenue through a pedestrian paseo and marked midblock crossings. Currently doing this requires traversing private parking lots while Alternative 8 design would create and enhance this connection through the proposed site design.

REVIEW OF CONSISTENCY WITH CURRENT HOLLYWOOD COMMUNITY PLAN

The Hollywood Community Plan was adopted in 1988. While an updated Community Plan is currently under development, the plan from 1988 is currently in effect and forms the basis for this review of conflicts relating to the transportation system.

The Hollywood Community Plan (HCP) is one of 35 in the City of Los Angeles that establishes the policies and programs that inform the framework for local land use, circulation, and service systems within the selected community plan area. Per the City's new TAG, a review of the HCP was conducted to evaluate whether the project conflicts with or precludes the implementation of the community plan framework.

From a circulation perspective, the HCP offers the following objective on page HO-1:

> **Objective 6:** To make provision for a circulation system coordinated with land uses and densities and adequate to accommodate traffic; and to encourage the expansion and improvement of public transportation service.:

The 1988 Hollywood Community Plan also includes a circulation policy section and a circulation public improvement program. The policy section provides a discussion regarding public provision of an improved public transportation system and/or additional highways and freeways. The Plan commits to following the standards in, and incorporates by reference those standards and other guidelines in, Mobility Plan 2035 of the Los Angeles General Plan and the transportation program described in Section 518.1 of the Hollywood Redevelopment Plan

The HCP offers the following policies on pages HO-3 and HO-4:

- Arterials and local streets shall be developed with standards and criteria contained in the Mobility Plan 2035.
    - As shown in Table 2.1-2, the roadway widths and classifications for adjacent streets have been reviewed and determined not be in conflict with or preclude implementation of the strategies described in MP2035 or the HCP.
- The HCP refers to local street classifications and features of the roadway system that incorporate MP2035 and the transportation component of the Hollywood Redevelopment Plan.
    - This plan was adopted in 1988 and prior to the adoption of SB 743, which has shifted the City's transportation analysis from a capacity-based analysis to a VMT-based analysis.
    - This Project does not conflict with or preclude the implementation of SB 743, the City's transportation analysis methodology, or preclude the study of additional improvements as discussed in the Hollywood Redevelopment Plan within the context of the current VMT-based transportation analysis framework.

Additionally, the HCP describes several programs on page HO-6:

a. Continued development of the freeway, arterial, and street system in conformance with the existing and future adopted programs. This should include participation of the City in a regional study focusing on Route 2 capacity increases.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
b. Continued planning of and improvements to the public transportation system of the community, including people-mover systems in high intensity areas as well as the proposed Metro Rail System.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
c. Preparation of a Hollywood Transportation Plan in ordinance form which creates an integrated program of transportation mitigation measures.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
d. Improvement of the Highland/Franklin intersections, including jog elimination either through realignment of Franklin Avenue or through grade separation.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
e. Improvement of Fountain Avenue as an east-west arterial, including jog elimination in the vicinity of Le Conte Junior High School.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
f. Improvement of the Hollywood Boulevard/La Brea intersection, including jog elimination.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
g. Improvement of the Los Feliz Boulevard/Western Avenue intersection, including realignment of the curve.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.
h. Improvement of Martel Avenue/Vista Street as a north-south arterial, including jog elimination north of Waring Avenue.
    i. Alternative 8 does not conflict with or prevent the City from pursuing this program.

2.4 SUBSTANTIALLY INCREASING HAZARDS DUE TO A GEOMETRIC DESIGN FEATURE OR INCOMPATIBLE USE

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. These impacts are typically evaluated for permanent conditions after project completion, but can also be evaluated for temporary conditions during project construction.

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:

Screening Criteria

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

  Yes, however the total number of driveways on the site will be less than exist today

- 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.)?

  Yes, Alternative 8 is proposing to install a signalized crossing at the intersection of Argyle Avenue and James M. Nederlander Way/Project Driveway.

Methodology

Project Impacts

For vehicle, bicycle and pedestrian safety impacts, review 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]). Where project driveways would cross pedestrian facilities or bicycle facilities (bike lanes or bike paths), consider operational and safety issues related to the potential for vehicle/pedestrian and vehicle/bicycle conflicts and the severity of consequences that could result.

Impact Criteria Evaluation

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)?

Preliminary project access plans are to be reviewed in light of commonly-accepted traffic engineering design standards (Section 321 of LADOT's Manual of Policies and Procedures, which provides guidance on driveway design) 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.
    - Ivar Avenue Driveways: Alternative 8 has collected pedestrian counts at the intersections of Yucca Street and Hollywood Boulevard with Ivar Avenue. The Ivar Avenue & Hollywood Boulevard intersection displays relatively high pedestrian counts, with 310 pedestrian crossings during the busiest AM peak hour and 1,170 pedestrian crossings during the busiest PM peak hour.
    - Argyle Avenue Driveways: Alternative 8 has collected pedestrian counts at the intersections of Yucca Street and Hollywood Boulevard with Argyle Avenue. The Argyle Avenue & Hollywood Boulevard intersection displays relatively high pedestrian counts, with 555 pedestrian crossings during the busiest AM peak hour and 1,359 pedestrian crossings during the busiest PM peak hour.
    - The Project Site is located in Hollywood near the Walk of Fame and around a location with many pedestrian locations and many travel options including bus, rail, foot, bike, personal mobility devices, transportation network companies, and/or personal vehicle. The area serves a high number of pedestrians and high quality pedestrian infrastructure that is already serving these high volumes of pedestrians, Alternative 8 is anticipating walk and transit credits of less than 100 pedestrian trips in any peak hour. Based on the quality of infrastructure, level of existing activity, and anticipated additional activity attributable to Alternative 8, this is not expected to result in deficiencies or substantially increase hazards.

- 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.

  Pedestrian access to the Project Site would be provided via sidewalks around the perimeter of the Project Site, as well as a wide, landscaped Paseo extending east-west through the Project Site. Residents, visitors, patrons, and employees arriving to the Project Site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking facilities. A signalized mid-block crosswalk would be provided across Argyle Avenue to help facilitate local pedestrian circulation and access by maintaining a path of east-west travel with the existing mid-block crosswalks across Ivar Avenue and Vine Street. This signal would also control the intersection of Carlos Avenue and Argyle Avenue. Alternative 8's access locations would be designed to the City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian safety. All roadways and driveways intersect at right angles, street

trees, and other potential impediments to adequate driver and pedestrian visibility would be minimal. Separate pedestrian entrances would provide access from the adjacent streets, parking facilities, and transit stops.

- East Site – Full-access driveway aligned with James M. Nederlander Way[1] providing signalized full-access to and from Argyle Avenue
- West Site – Driveway would be stop-controlled with full-access to and from Ivar Avenue

The existing Yucca Street driveway, located between Vine Street and Argyle Avenue, would provide dedicated access to the Capitol Records Building parking lot. The Yucca driveway would continue to operate as a full-access driveway that is stop-controlled and Alternative 8 would result in some of the parking spaces contiguous with the Capitol Records Building being replaced on-site. There would be no vehicular access on Vine Street.

While there are currently five curb cuts on the West Site and six curb cuts on the East Site (11 total) Alternative 8 would reduce the number of curb cuts to two curb cuts on the West Site and three curb cuts on the East Site. Furthermore, the existing curb cuts that would be removed would restore continuity to the sidewalks along the existing Walk of Fame. Access to the Capitol Records Complex (including both the Capitol Records Building and the Gogerty Building) would continue to be provided via the existing driveway on Yucca Street.

On the East Site, the loading area is accessed via the alley behind the Pantages Theatre. This is south of the proposed Project driveway/signal at Argyle Avenue & James M. Nederlander Way. On the West Site, service vehicles may access either driveway to reach the loading area.

The resident/visitor and service driveways would be designed to comply with LADOT standards. The driveways would not require the removal or relocation of existing transit stops, and would be designed and configured to avoid potential conflicts with transit services and pedestrian traffic.

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

  Ivar Avenue Driveway: There is no designated bicycle facility on Ivar Avenue and the counts at Hollywood Boulevard & Ivar Avenue show two to six bicyclists on this street during the AM and PM peak hours, respectively.

  Argyle Avenue Driveway: There is a designated bike route along Argyle and the counts at Hollywood Boulevard & Argyle Avenue show two to six bicyclists on this street during the AM and PM peak hours, respectively.

[1] Nederlander Way is a private street serving the Eastown development.

Because Alternative 8 will not increase the number of driveways and the location of those driveways is generally consistent with the current placement Alternative 8 would not substantially contribute to an increase in hazards for this condition.

- 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.

  Ivar has a very gradual slope up from Hollywood Boulevard to Yucca Street. Argyle's slope is more pronounced between those two streets and is a result of the natural topography. As mentioned, there will be a signal at the Argyle driveway, in addition to a new pedestrian crosswalk, which is intended to alleviate vehicle/pedestrian conflicts by providing a marked and signalized crossing. Additionally, the sidewalk infrastructure is in good condition, providing sight lines that are not limited by landscaping or other barriers. Alternative 8 will not contribute to additional barriers or obstructions while improving sidewalks immediately adjacent to the Project Site.

- Alternative 8's 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.

  The following streets are on the High Injury Network within the intersection analysis study area: Yucca Street (between Cahuenga Boulevard and Argyle Avenue), Vine Street (south of Franklin Avenue), and Hollywood Boulevard (throughout study area). No Project driveways are along the HIN. Alternative 8 has limited frontage on Yucca Street and no frontage on Hollywood Boulevard. Alternative 8 proposes to remove the existing driveways on Vine Street and consolidate access so that Alternative 8 does not take access from Vine Street or interrupt the Walk of Fame. Alternative 8 would not preclude or conflict with changes to the right-of-way in service of Vision Zero projects on Yucca Street, Vine Street or Hollywood Boulevard.

  Safe Routes to School improvements have been made in the study area on streets that do not include proposed Project driveways.

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

  Alternative 8 proposes a mix of land uses and site amenities in a vibrant area that already includes a mix of uses and transportation options. Due to the reduced number of driveways and site design that promotes multimodal access and travel, there are not any other conditions or incompatible uses identified that would substantially increase transportation hazards.

Cumulative Impacts

Review project site access plans for related projects with access points proposed along the same block(s) as the proposed project. Determine the combined impact and the project's contribution.

Several of the related projects surrounding the Hollywood Center site have been built. These include: 6230 W Yucca St, 1800 N Argyle Av, 6200 W Hollywood Bl, 6381 W Hollywood Bl. Only 1800 N Argyle Av has a driveway on the same street as Hollywood Center (East Site). The two remaining related projects will not have driveways on either Argyle or Ivar, therefore access points from related projects are not anticipated to have a cumulative impact.

Attachment B – VMT Calculators and Reports

East Site

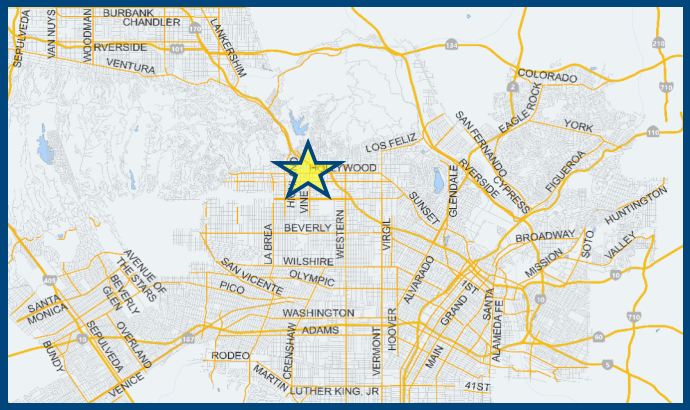
CITY OF LOS ANGELES VMT CALCULATOR Version 1.1

Project Information

Project: Hollywood Center

Scenario: Alternative 8 East Site

Address: 1770 N VINE ST, 90028



Land Use Type	Value	Unit
Office | General Office	386.347	ksf
Retail | High-Turnover Sit-Down Restaurant	12.242	ksf
Retail | Fast-Food Restaurant	2.16	ksf
Retail | Movie Theater	175	Seats
Office | General Office	386.347	ksf

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

TDM Strategies

Select each section to show individual strategies

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

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
150 monthly parking cost (dollar) for the project site

Parking Cash-Out
☑ Proposed Prj ☐ Mitigation
25 percent of employees eligible

Price Workplace Parking
☑ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
25 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
2,728 Daily Vehicle Trips	**2,728** Daily Vehicle Trips
19,819 Daily VMT	**19,819** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
5.0 Work VMT per Employee	**5.0** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 7.6 15% Below APC	**Work: No** Threshold = 7.6 15% Below APC

Measuring the Miles

8/10/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 East Site
Project Address: 1770 N VINE ST, 90028

Version 1.0

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	12.242	ksf
	Fast-Food Restaurant	2.160	ksf
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement Superstore	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	175	Seats
Office	General Office	386	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*
Other		*0*	*Trips*

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 East Site
Project Address: 1770 N VINE ST, 90028

Version 1.0

Analysis Results			
Total Employees: 1612 *Total Population: 0*			
Proposed Project		***With Mitigation***	
2,728	**Daily Vehicle Trips**	**2,728**	**Daily Vehicle Trips**
19,819	**Daily VMT**	**19,819**	**Daily VMT**
0	**Household VMT per Capita**	**0**	**Household VMT per Capita**
5	**Work VMT per Employee**	**5**	**Work VMT per Employee**

Significant VMT Impact?			
APC: Central			
Impact Threshold: 15% Below APC Average Household = 6.0 Work = 7.6			
Proposed Project		***With Mitigation***	
VMT Threshold	***Impact***	***VMT Threshold***	***Impact***
Household > 6.0	No	*Household > 6.0*	No
Work > 7.6	No	*Work > 7.6*	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 ($)	$150	$150
	Parking cash-out	Employees eligible (%)	25%	25%
	Price workplace parking	Daily parking charge ($)	$6.00	$6.00
		Employees subject to priced parking (%)	25%	25%
	Residential area parking permits	*Cost of annual permit ($)*	*$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 (%)	50%	50%
		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 (%)	50%	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		*Description*	*Proposed Project*	*Mitigations*
Commute Trip Reductions	Required commute trip reduction program	Employees participating (%)	50%	50%
	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)	Urban + Comprehensive Transit	Urban + Comprehensive Transit
	Bike share	Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)	Yes	Yes
	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*
	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)	within project and connecting off-site	within project and connecting off-site

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 East Site
Project Address: 1770 N VINE ST, 90028

Version 1.0

TDM Adjustments by Trip Purpose & Strategy

Place type: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	Appendix B, Parking sections 1 - 6
	Unbundle parking	18%	18%	*0%*	*0%*	18%	18%	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Parking cash-out	*0%*	*0%*	2%	2%	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Price workplace parking	*0%*	*0%*	5%	5%	*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%*	Appendix B, Transit sections 1 - 3
	Implement neighborhood shuttle	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Transit subsidies	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	
Education & Encouragement	Voluntary travel behavior change program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	Appendix B, Education & Encouragement sections 1 - 2
	Promotions and marketing	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	*0%*	
Commute Trip Reductions	Required commute trip reduction program	*0%*	*0%*	11%	11%	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	Appendix B, Commute Trip Reductions sections 1 - 4
	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	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	Appendix B, Shared Mobility sections 1 - 3
	Bike share	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	
	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: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	Appendix B, Bicycle Infrastructure sections 1 - 3
	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%*	Appendix B, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

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	28%	28%	27%	27%	28%	28%	12%	12%	12%	12%	12%	11%
MAX. TDM EFFECT	28%	28%	27%	27%	28%	28%	12%	12%	12%	12%	12%	12%

= Minimum (X%, 1- (1-[a])*(1-[b]))

where: X%=

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

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 East Site
Project Address: 1770 N VINE ST, 90028

Version 1.0

MXD Methodology - Existing Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	0	0.0%	0	7.7	0	0
Home Based Other Production	0	0.0%	0	4.8	0	0
Non-Home Based Other Production	711	-15.2%	603	7.4	5,236	4,445
Home-Based Work Attraction	2,025	-34.3%	1,331	8.3	16,848	11,074
Home-Based Other Attraction	1,571	-49.4%	796	6.2	9,707	4,916
Non-Home Based Other Attraction	711	-15.2%	603	6.7	4,731	4,017

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	-28.2%	0	0	-28.2%	0	0
Home Based Other Production	-28.2%	0	0	-28.2%	0	0
Non-Home Based Other Production	-12.4%	529	3,895	-12.4%	529	3,895
Home-Based Work Attraction	-26.9%	973	8,098	-26.9%	973	8,098
Home-Based Other Attraction	-12.4%	697	4,307	-12.4%	697	4,307
Non-Home Based Other Attraction	-12.4%	529	3,519	-12.4%	529	3,519

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 1,612
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**8,098**	**8,098**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**5.0**	**5.0**

West Site

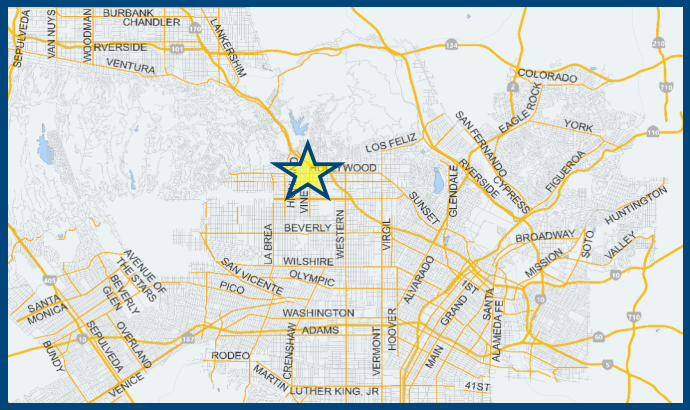
CITY OF LOS ANGELES VMT CALCULATOR Version 1.1

Project Information

Project: Hollywood Center

Scenario: Alternative 8 West Site

Address: 1745 N VINE ST, 90028



Land Use Type	Value	Unit
Housing | Affordable Housing - Senior	133	DU
Housing | Multi-Family	770	DU
Retail | High-Turnover Sit-Down Restaurant	10.827	ksf
Retail | Fast-Food Restaurant	1.911	ksf
Retail | Movie Theater	175	Seats
Housing | Affordable Housing - Senior	133	DU

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

TDM Strategies

Select each section to show individual strategies

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

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
- 150 — monthly parking cost (dollar) for the project site
- ☑ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 25 — 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
2,608 Daily Vehicle Trips	**2,608** Daily Vehicle Trips
16,170 Daily VMT	**16,170** Daily VMT
4.5 Household VMT per Capita	**4.5** Household VMT per Capita
2.6 Work VMT per Employee	**2.6** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 7.6 15% Below APC	**Work: No** Threshold = 7.6 15% Below APC

Measuring the Miles

8/10/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 West Site
Project Address: 1745 N VINE ST, 90028

Version 1.0

Project Information			
Land Use Type		***Value***	***Units***
Housing	*Single Family*	*0*	*DU*
	Multi Family	770	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	133	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	10.827	ksf
	Fast-Food Restaurant	1.911	ksf
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement Superstore	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	175	Seats
Office	*General Office*	*0*	*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*
Other		*0*	*Trips*

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 West Site
Project Address: 1745 N VINE ST, 90028

Version 1.0

Analysis Results			
Total Employees: 60 *Total Population: 1,896*			
Proposed Project		***With Mitigation***	
2,608	**Daily Vehicle Trips**	**2,608**	**Daily Vehicle Trips**
16,170	**Daily VMT**	**16,170**	**Daily VMT**
4.5	**Household VMT per Capita**	**4.5**	**Household VMT per Capita**
2.6	**Work VMT per Employee**	**2.6**	**Work VMT per Employee**

Significant VMT Impact?			
APC: Central			
Impact Threshold: 15% Below APC Average Household = 6.0 Work = 7.6			
Proposed Project		***With Mitigation***	
VMT Threshold	***Impact***	***VMT Threshold***	***Impact***
Household > 6.0	No	*Household > 6.0*	No
Work > 7.6	No	*Work > 7.6*	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 ($)	$150	$150
	Parking cash-out	Employees eligible (%)	25%	25%
	Price workplace parking	Daily parking charge ($)	$6.00	$6.00
		Employees subject to priced parking (%)	50%	50%
	Residential area parking permits	*Cost of annual permit ($)*	*$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 (%)	50%	50%
		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 (%)	50%	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		*Description*	*Proposed Project*	*Mitigations*
Commute Trip Reductions	Required commute trip reduction program	Employees participating (%)	50%	50%
	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)	Urban + Comprehensive Transit	Urban + Comprehensive Transit
	Bike share	Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)	Yes	Yes
	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*
	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)	within project and connecting off-site	within project and connecting off-site

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 West Site
Project Address: 1745 N VINE ST, 90028

Version 1.0

TDM Adjustments by Trip Purpose & Strategy

Place type: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Appendix B, Parking sections 1 - 6
	Unbundle parking	18%	18%	0%	0%	18%	18%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	10%	10%	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%	Appendix B, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	Appendix B, Education & Encouragement sections 1 - 2
	Promotions and marketing	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	11%	11%	0%	0%	0%	0%	0%	0%	0%	0%	Appendix B, Commute Trip Reductions sections 1 - 4
	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	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	Appendix B, Shared Mobility sections 1 - 3
	Bike share	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	
	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: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	Appendix B, Bicycle Infrastructure sections 1 - 3
	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%*	Appendix B, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

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	28%	28%	31%	31%	28%	28%	12%	12%	12%	12%	12%	11%
MAX. TDM EFFECT	28%	28%	31%	31%	28%	28%	12%	12%	12%	12%	12%	12%

= Minimum (X%, 1- (1-[a])*(1-[b]))

where: X%=

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

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: August 10, 2020
Project Name: Hollywood Center
Project Scenario: Alternative 8 West Site
Project Address: 1745 N VINE ST, 90028

Version 1.0

MXD Methodology - Existing Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	1,108	-40.3%	662	7.6	8,416	5,037
Home Based Other Production	2,968	-51.2%	1,448	4.7	13,989	6,834
Non-Home Based Other Production	246	-16.2%	206	8.3	2,043	1,714
Home-Based Work Attraction	86	-71.6%	25	8.5	732	220
Home-Based Other Attraction	1,168	-52.2%	559	7.0	8,228	3,946
Non-Home Based Other Attraction	544	-15.0%	462	6.2	3,395	2,887

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	-28.2%	475	3,619	-28.2%	475	3,619
Home Based Other Production	-28.2%	1,040	4,910	-28.2%	1,040	4,910
Non-Home Based Other Production	-12.4%	181	1,502	-12.4%	181	1,502
Home-Based Work Attraction	-30.7%	17	152	-30.7%	17	152
Home-Based Other Attraction	-12.4%	490	3,457	-12.4%	490	3,457
Non-Home Based Other Attraction	-12.4%	405	2,529	-12.4%	405	2,529

MXD VMT Methodology Per Capita & Per Employee

Total Population: 1,896
Total Employees: 60
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**8,529**	**8,529**
Total Home Based Work Attraction VMT	**152**	**152**
Total Home Based VMT Per Capita	**4.5**	**4.5**
Total Work Based VMT Per Employee	**2.6**	**2.6**

Attachment C - Volumes

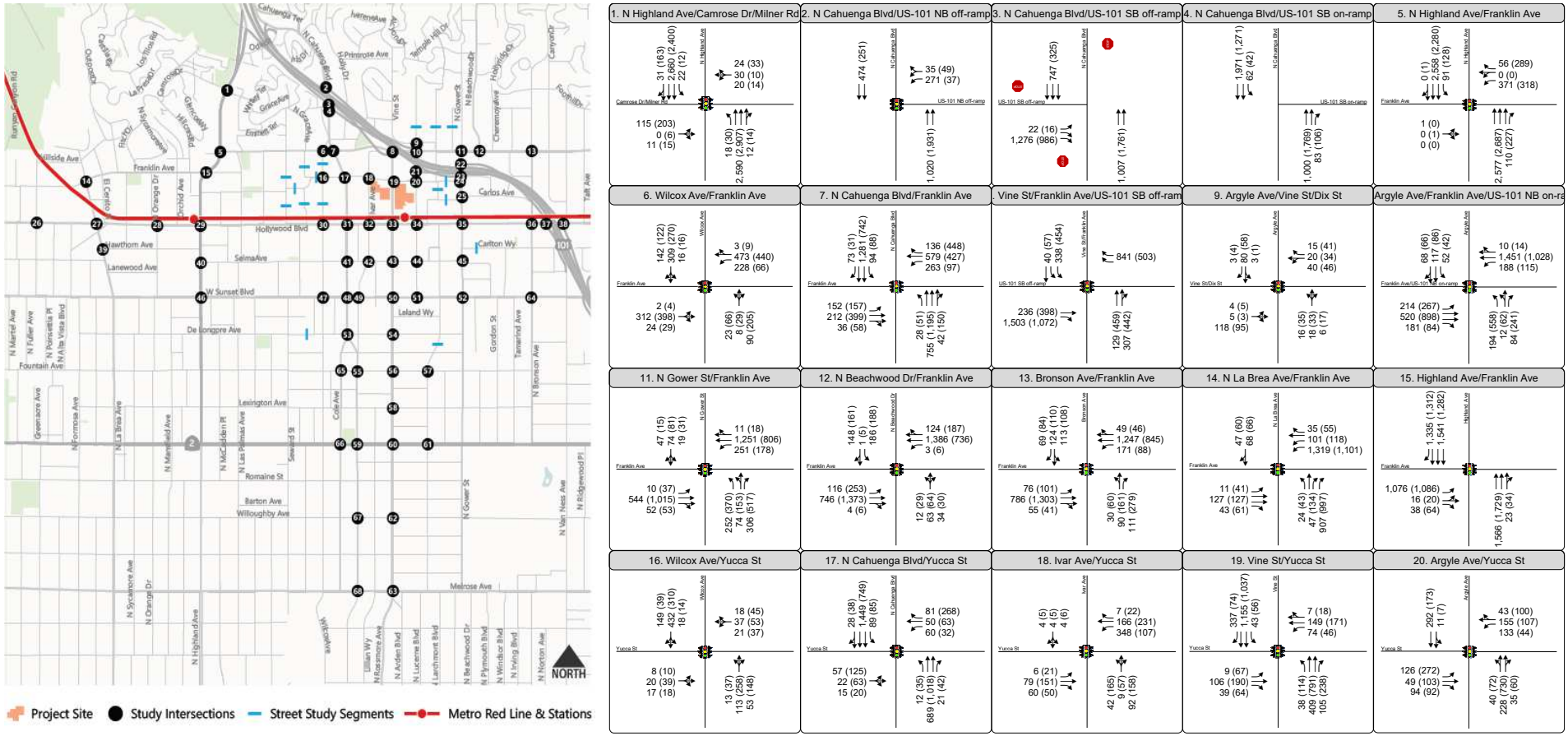


Figure C-1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2018) + Project - Alternative 8

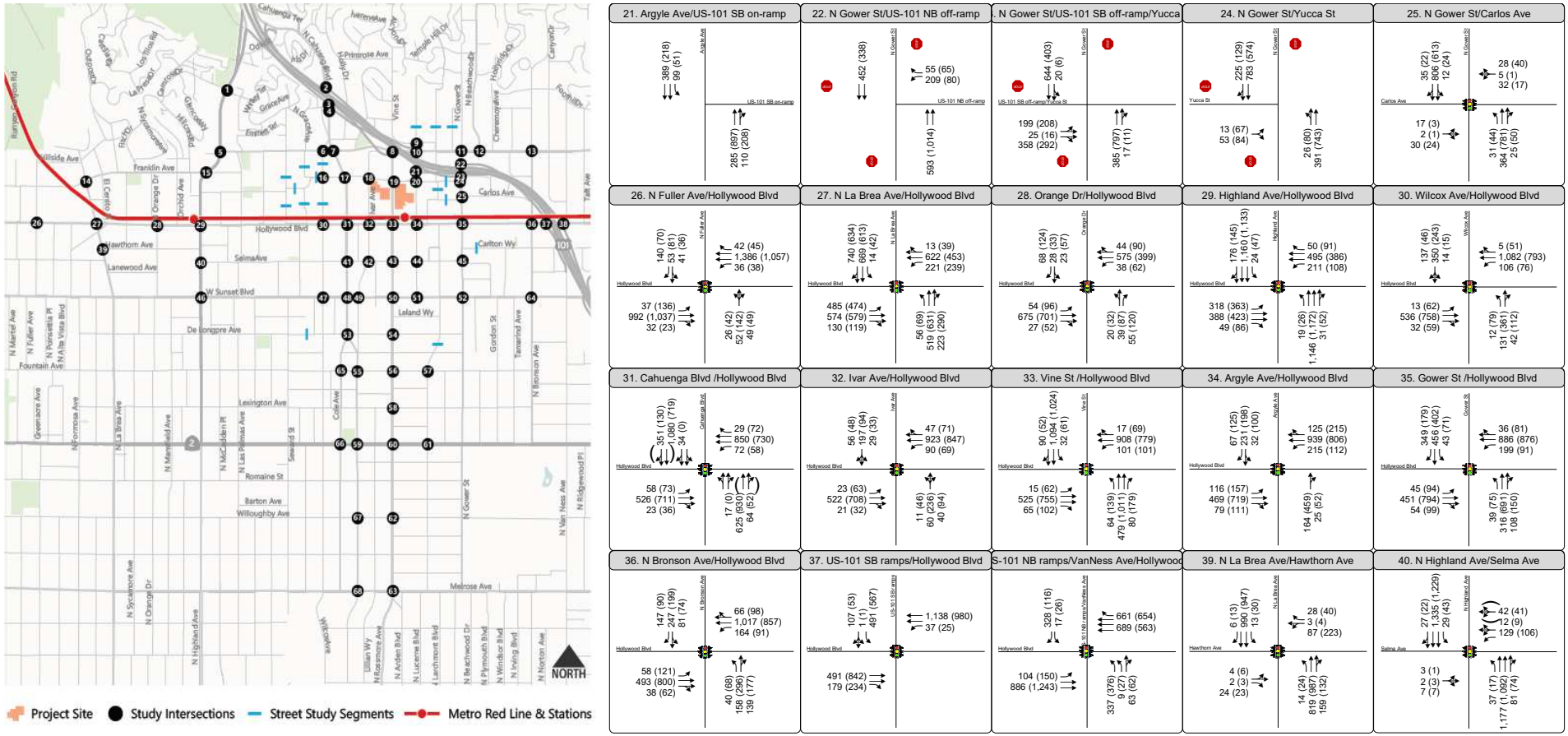


Figure C-1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2018) + Project - Alternative 8

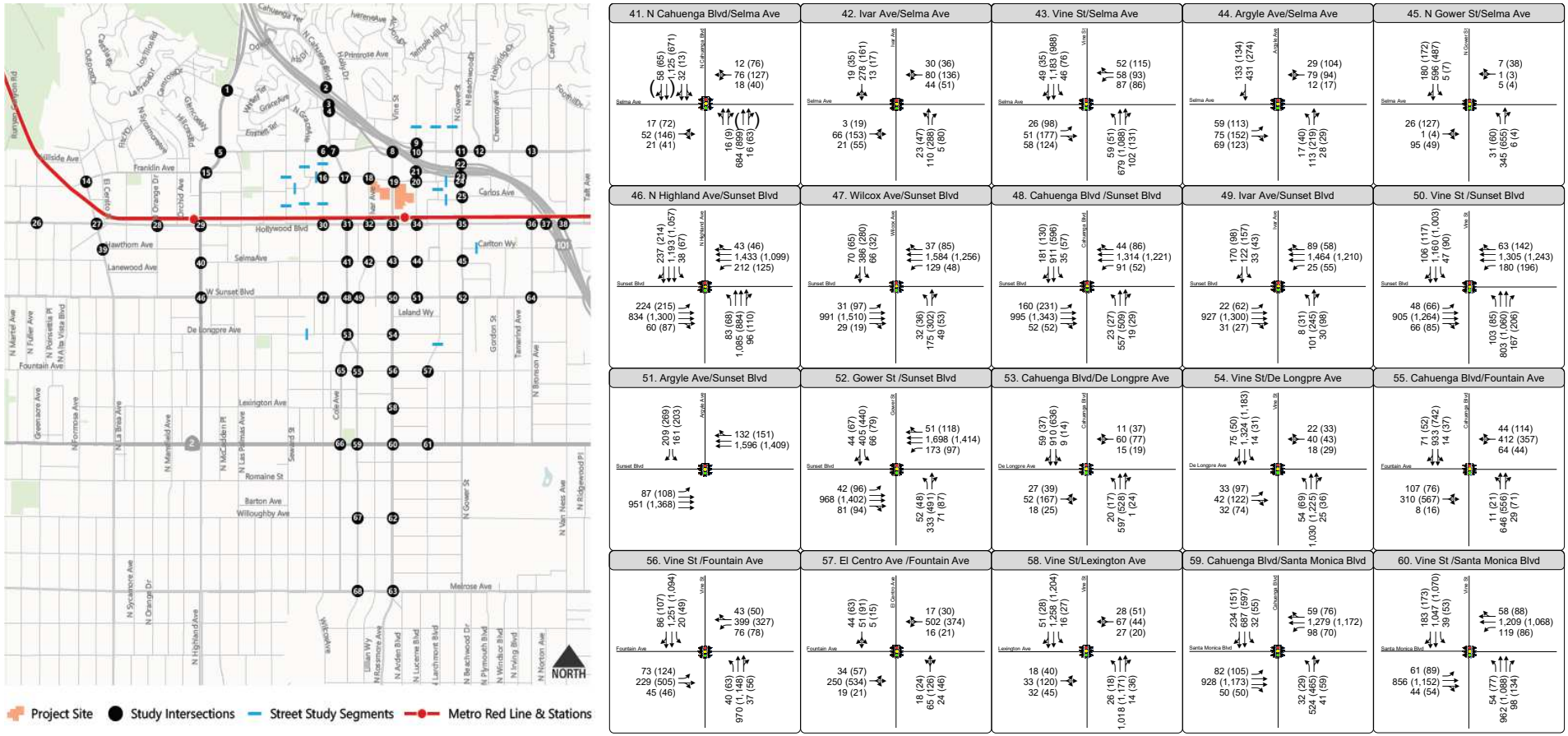
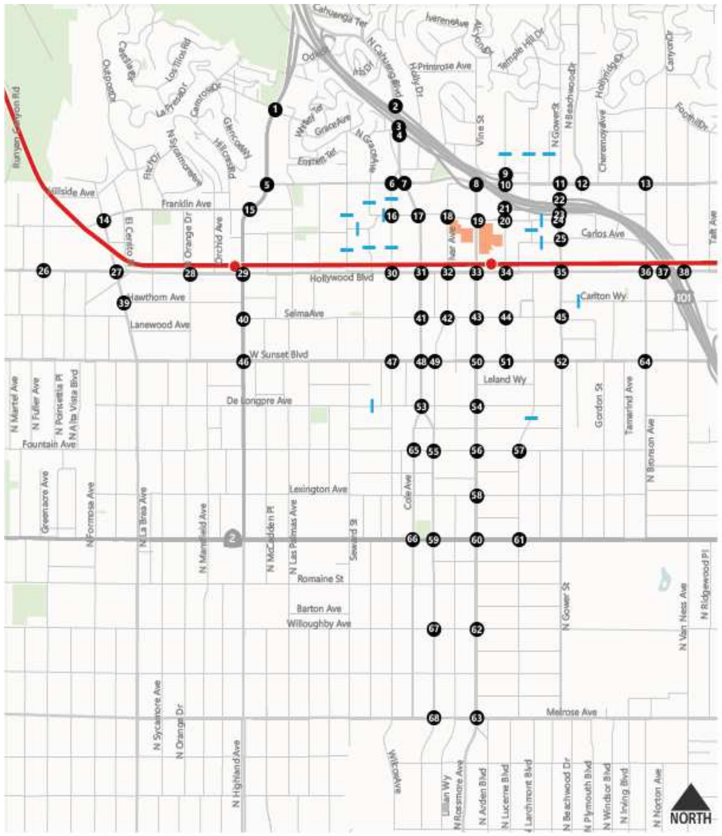


Figure C-1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2018) + Project - Alternative 8



Project Site · Study Intersections · Street Study Segments · Metro Red Line & Stations

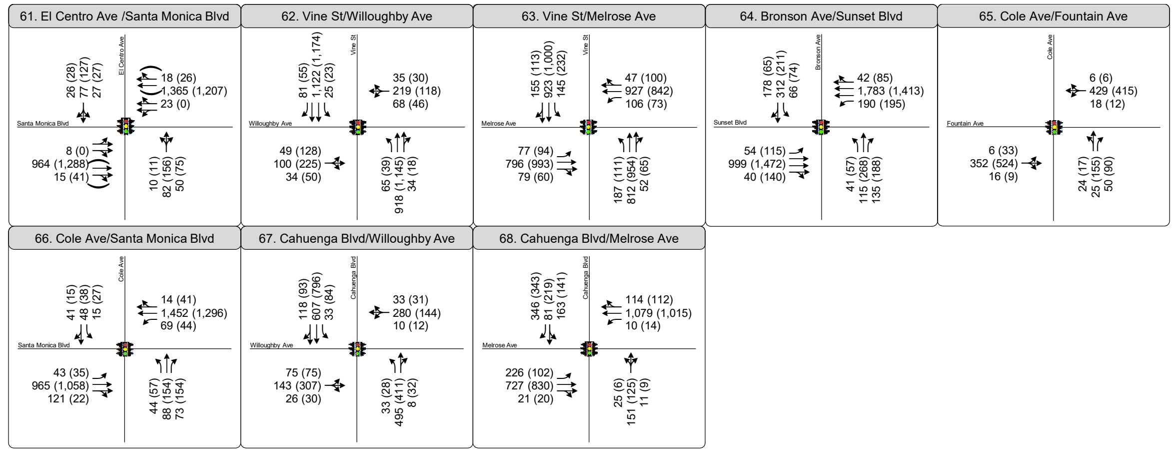


Figure C-1
Peak Hour Traffic Volumes and Lane Configurations
Existing (2018) + Project - Alternative 8

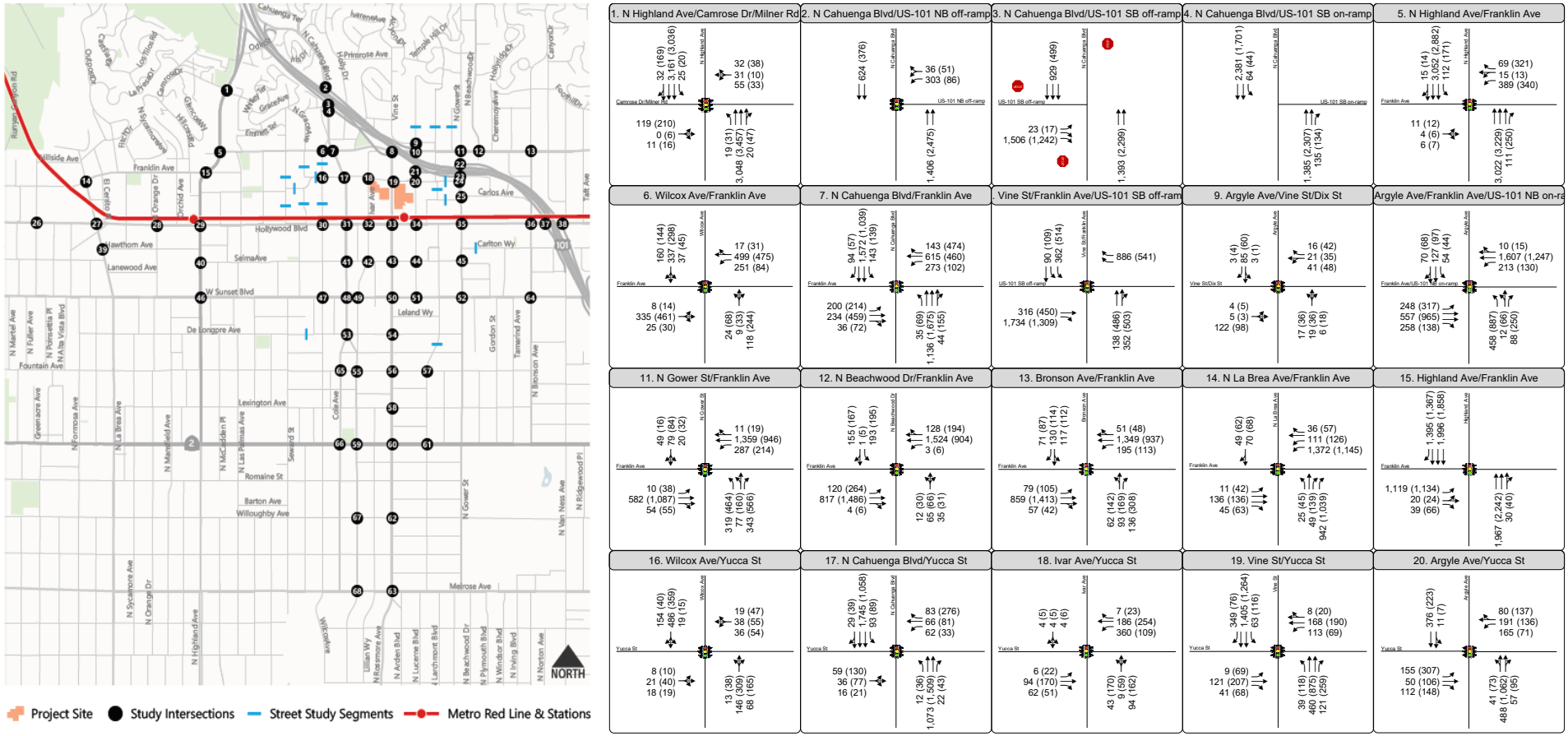
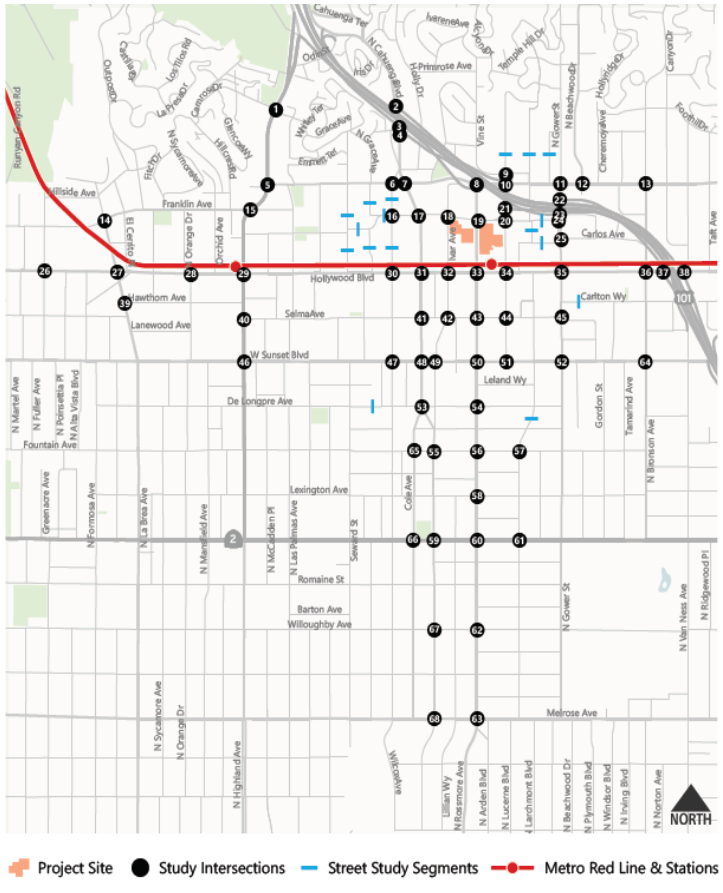


Figure C-2
Peak Hour Traffic Volumes and Lane Configurations
Future (2027) + Project - Alternative 8



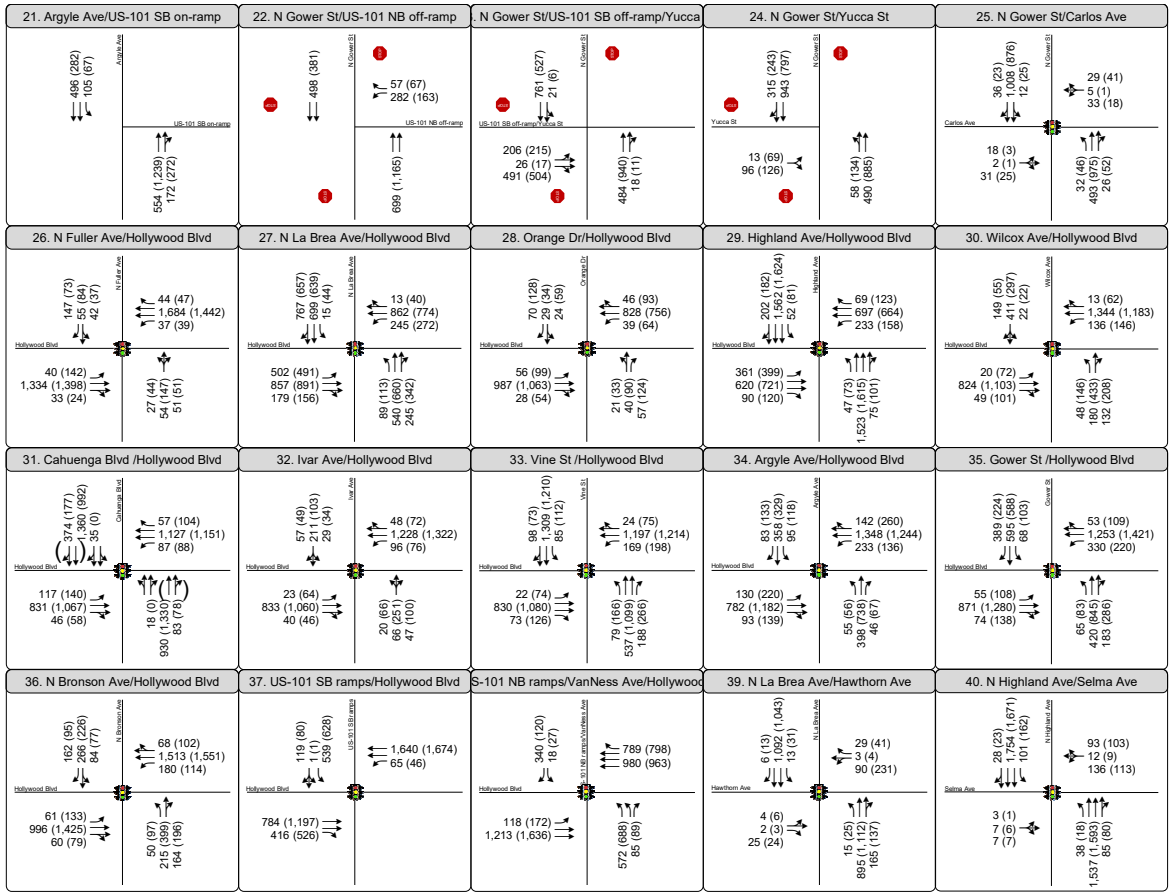


Figure C-2
Peak Hour Traffic Volumes and Lane Configurations
Future (2027) + Project - Alternative 8

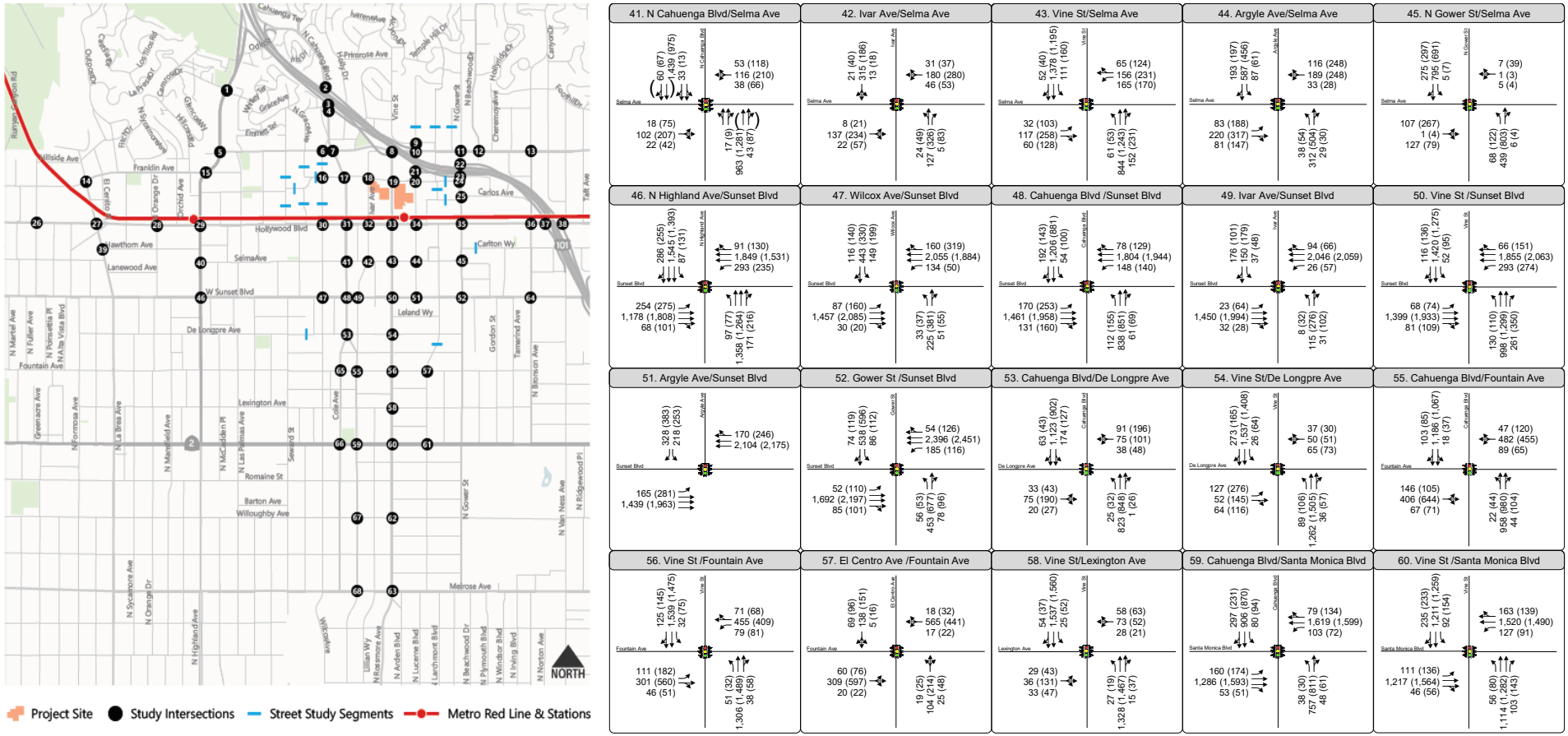
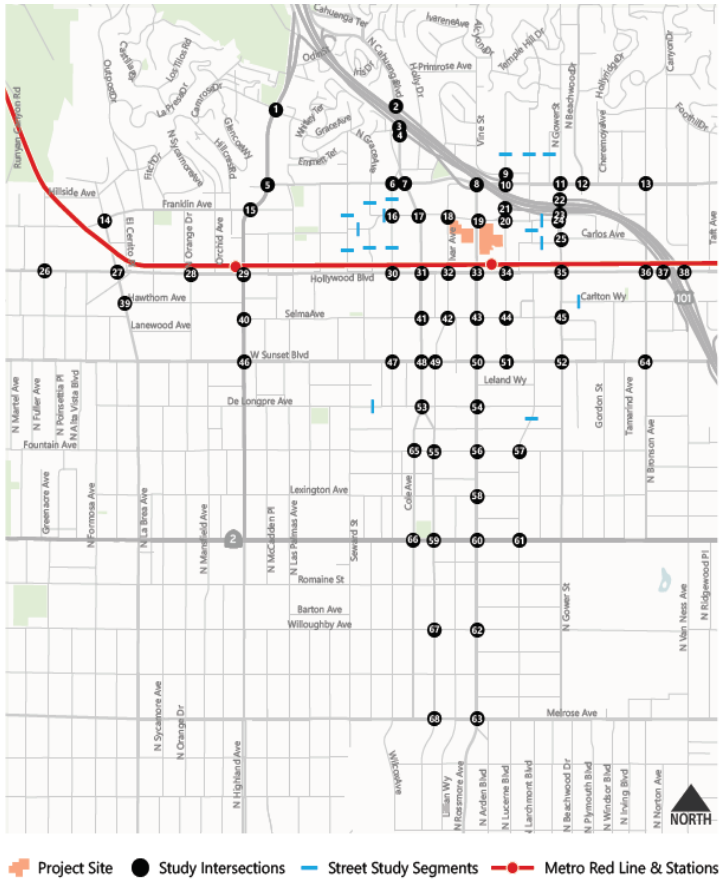


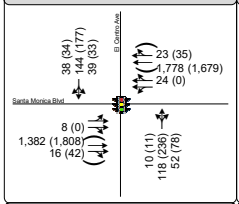
Figure C-2

Peak Hour Traffic Volumes and Lane Configurations

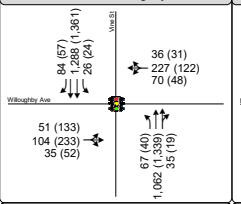
Future (2027) + Project - Alternative 8



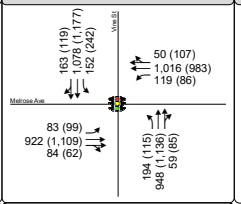
61. El Centro Ave /Santa Monica Blvd



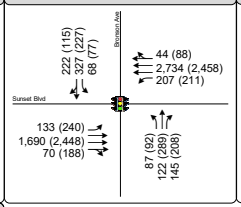
62. Vine St/Willoughby Ave



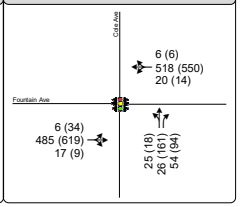
63. Vine St/Melrose Ave



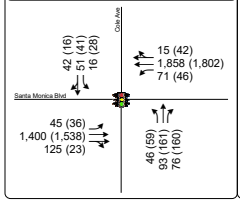
64. Bronson Ave/Sunset Blvd



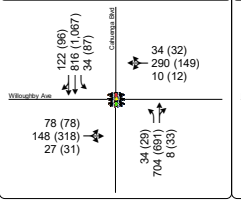
65. Cole Ave/Fountain Ave



66. Cole Ave/Santa Monica Blvd



67. Cahuenga Blvd/Willoughby Ave



68. Cahuenga Blvd/Melrose Ave

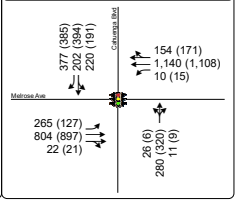


Figure C-2
Peak Hour Traffic Volumes and Lane Configurations
Future (2027) + Project - Alternative 8

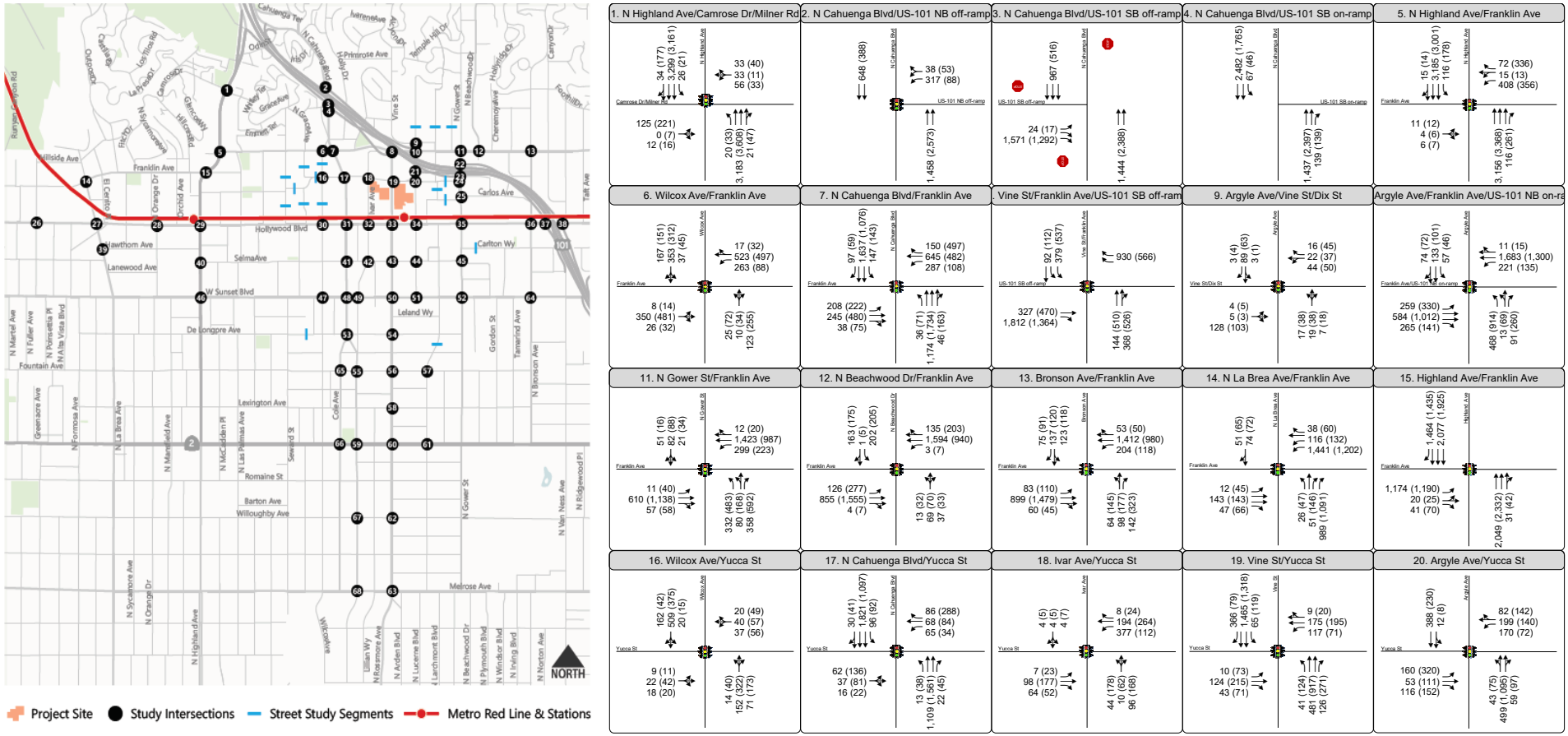
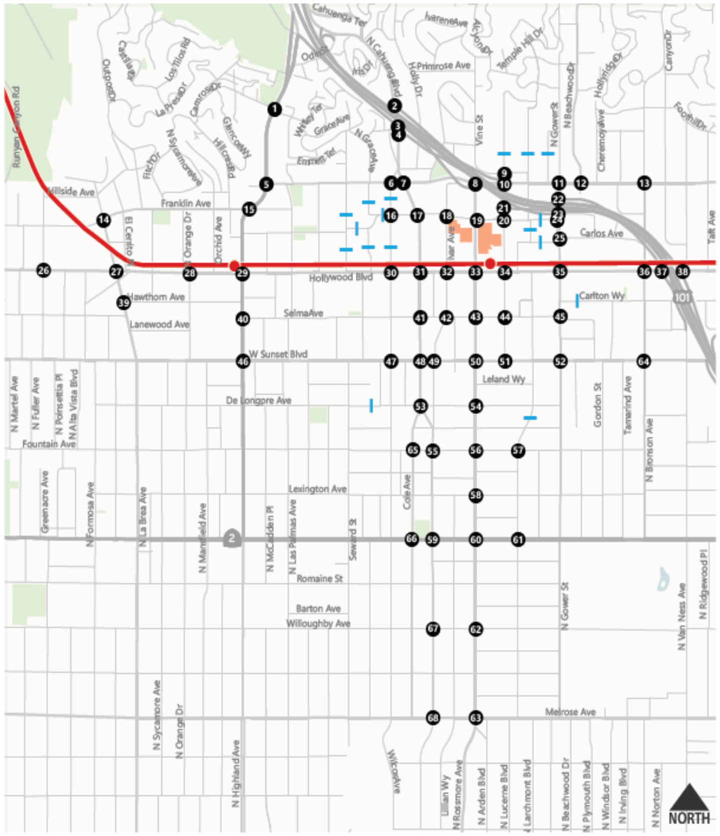
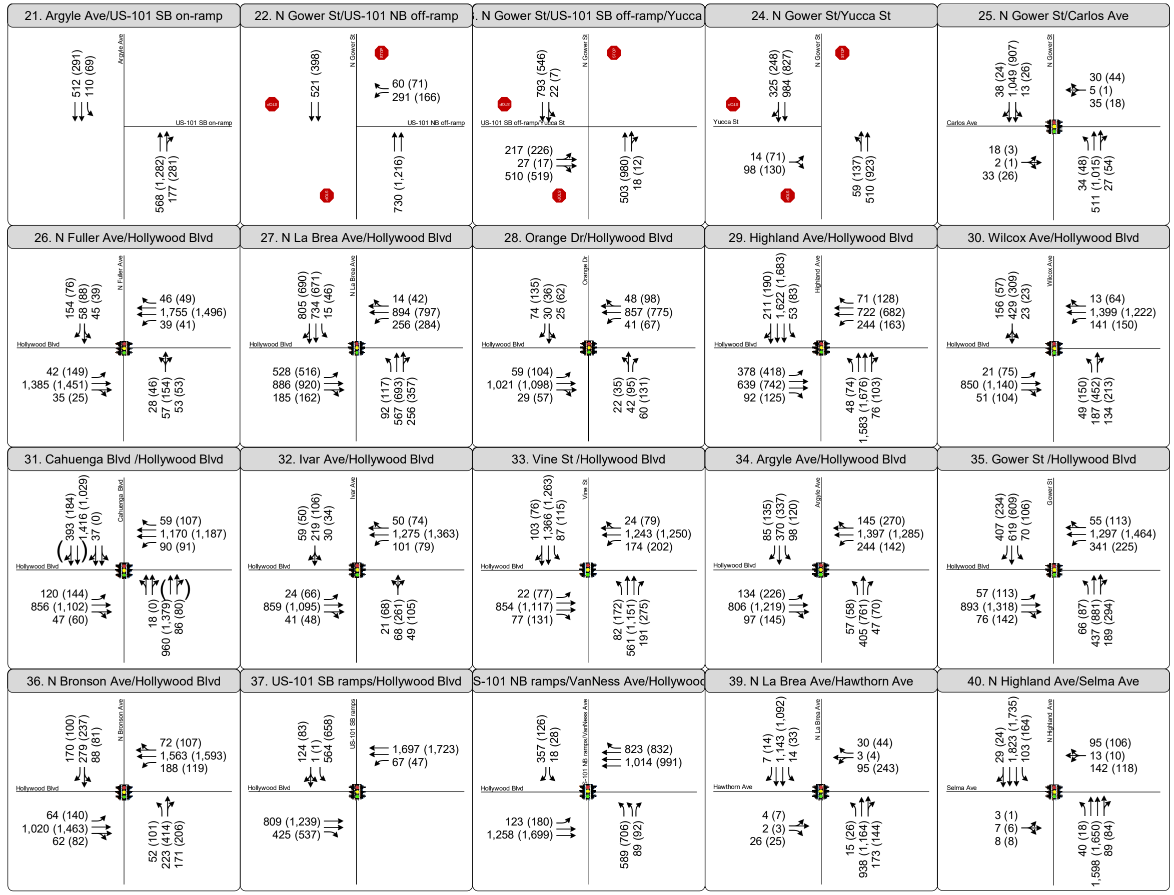


Figure C-3
Peak Hour Traffic Volumes and Lane Configurations
Future (2040) + Project - Alternative 8





Project Site · Study Intersections · Street Study Segments · Metro Red Line & Stations

Figure C-3

Peak Hour Traffic Volumes and Lane Configurations

Future (2040) + Project - Alternative 8

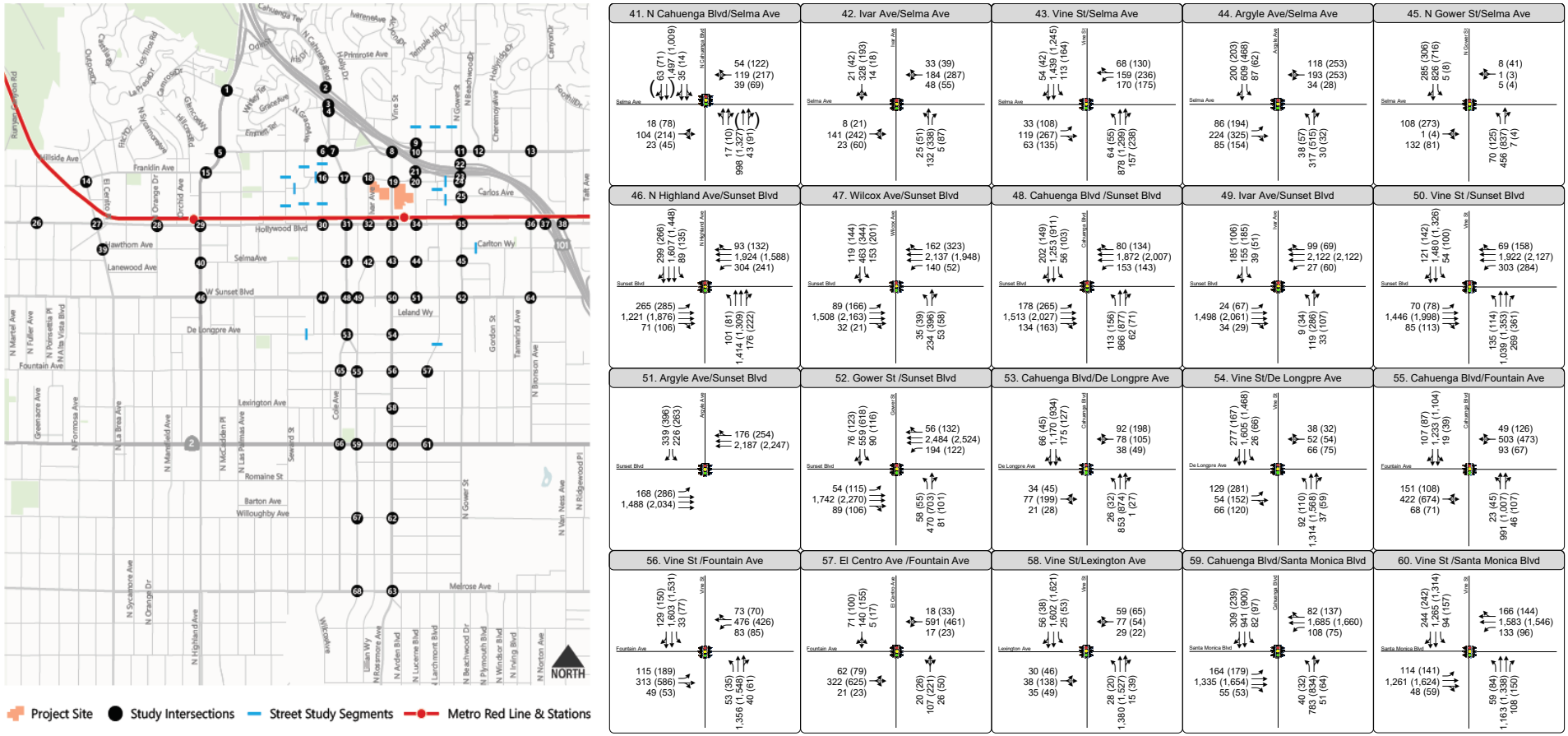
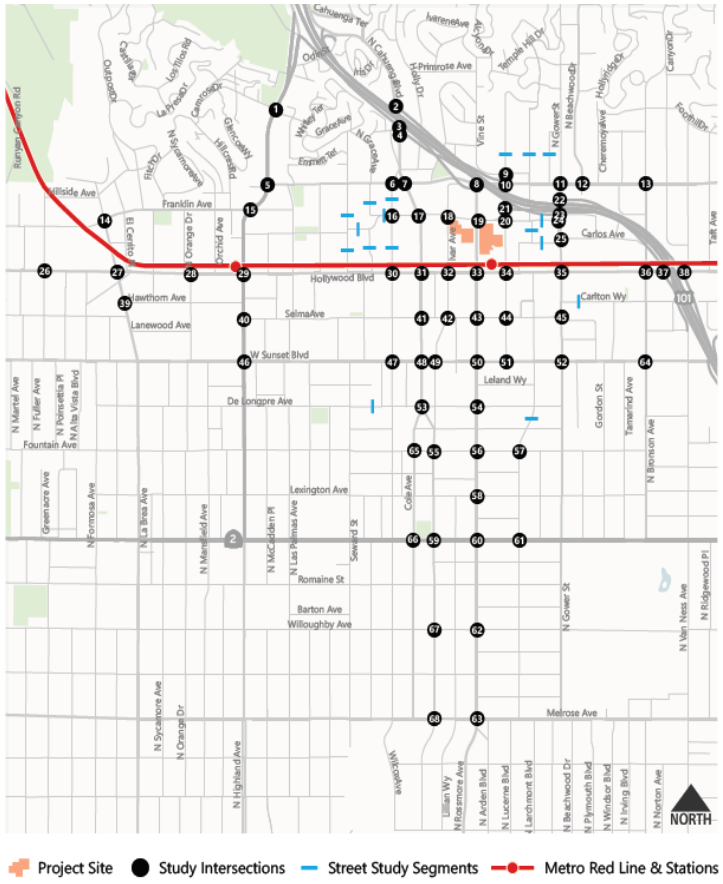


Figure C-3
Peak Hour Traffic Volumes and Lane Configurations
Future (2040) + Project - Alternative 8



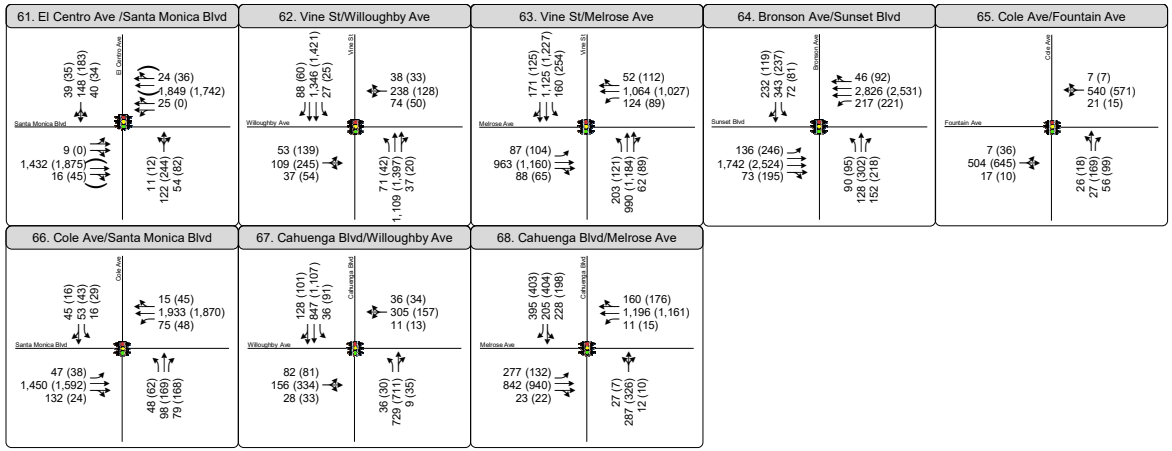


Figure C-3
Peak Hour Traffic Volumes and Lane Configurations
Future (2040) + Project - Alternative 8

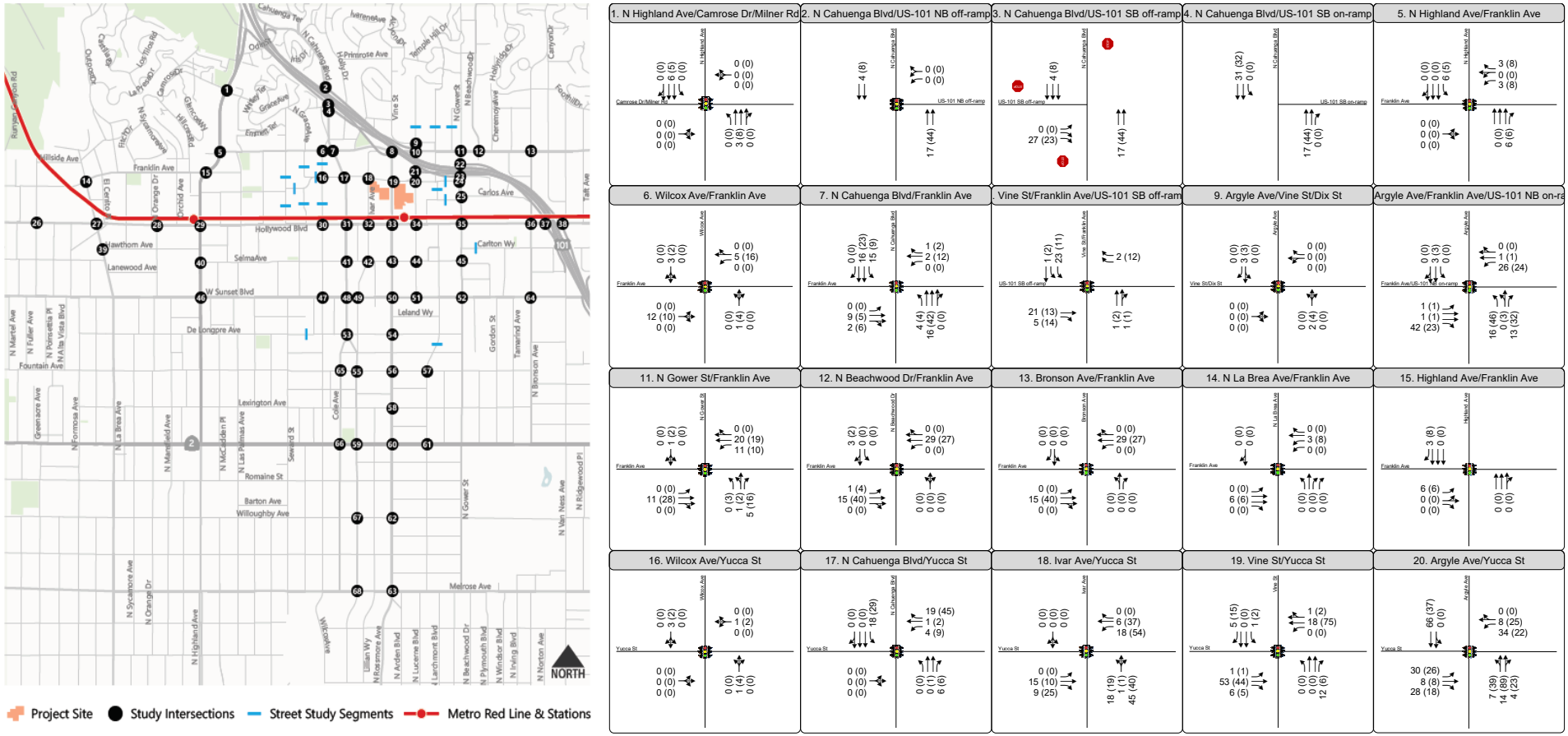


Figure C-4
Peak Hour Traffic Volumes and Lane Configurations
Project Only - Alternative 8

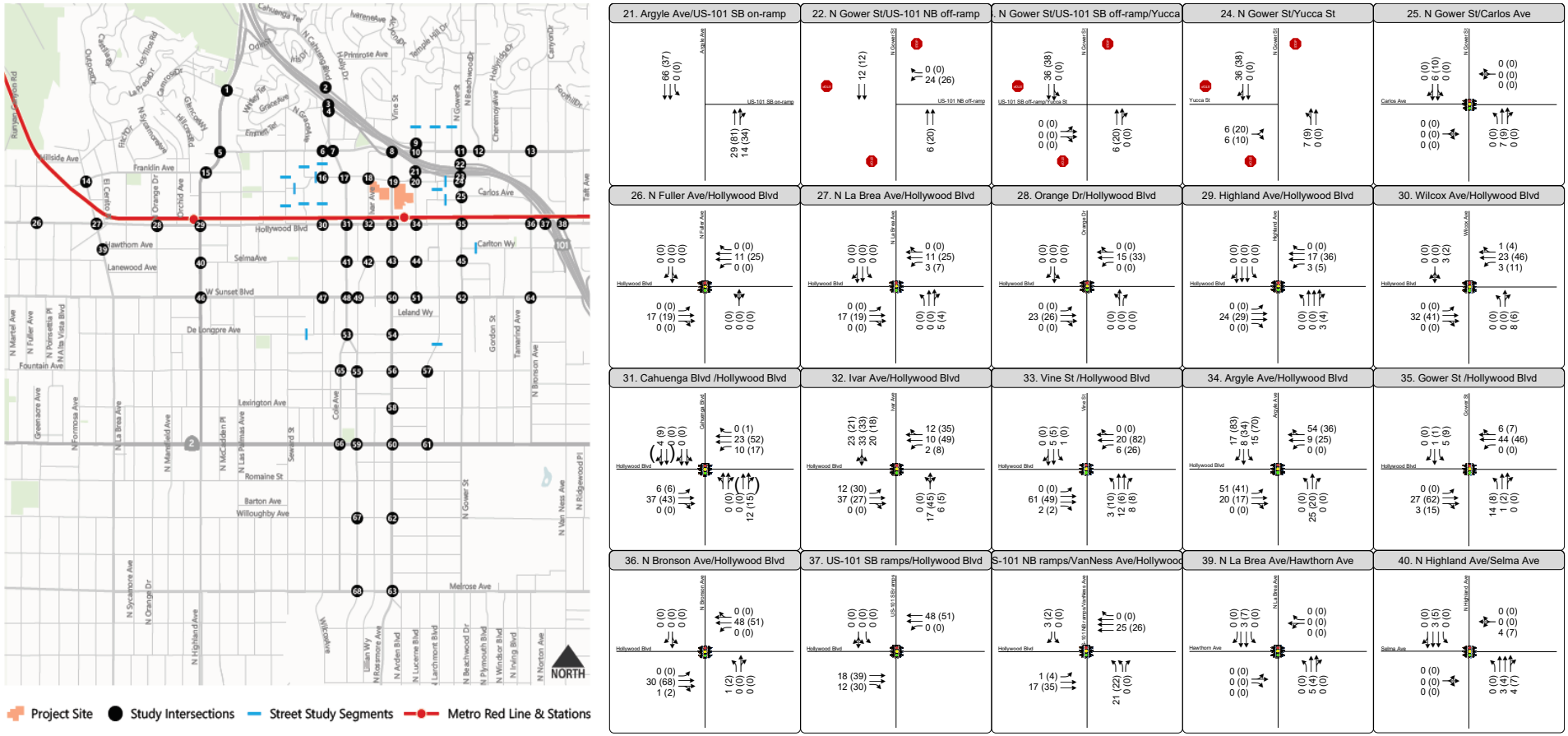


Figure C-4
Peak Hour Traffic Volumes and Lane Configurations
Project Only - Alternative 8

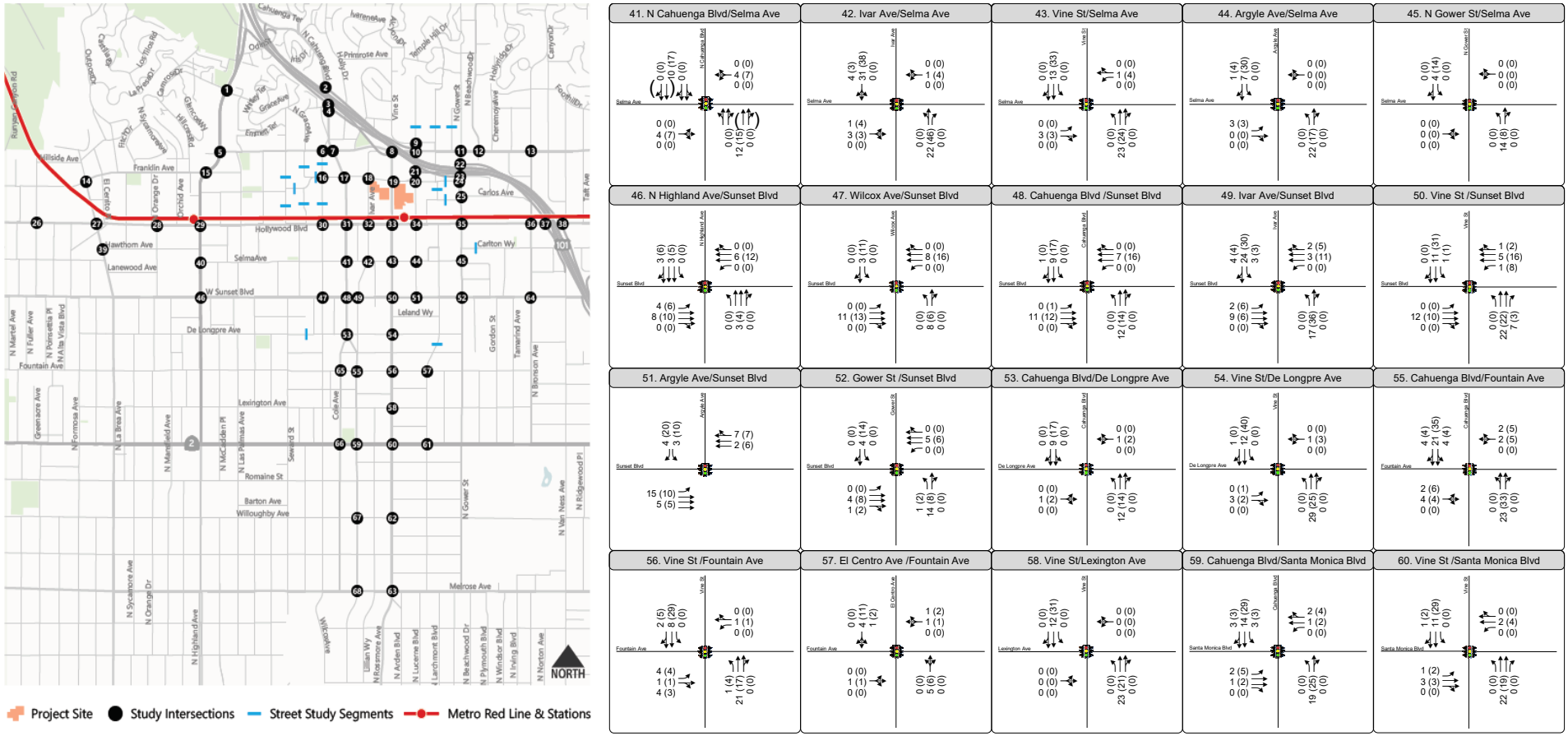
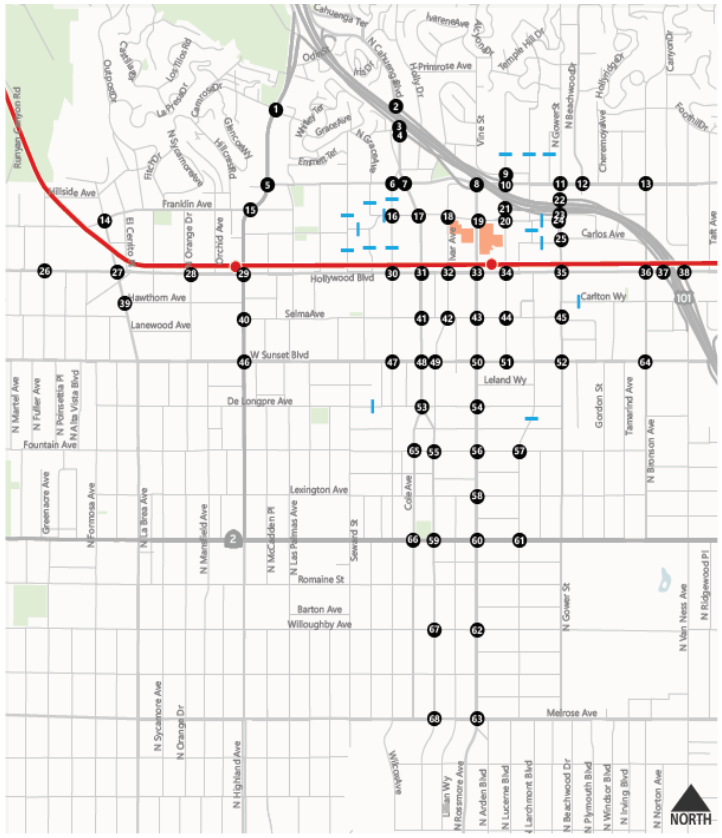


Figure C-4
Peak Hour Traffic Volumes and Lane Configurations
Project Only - Alternative 8



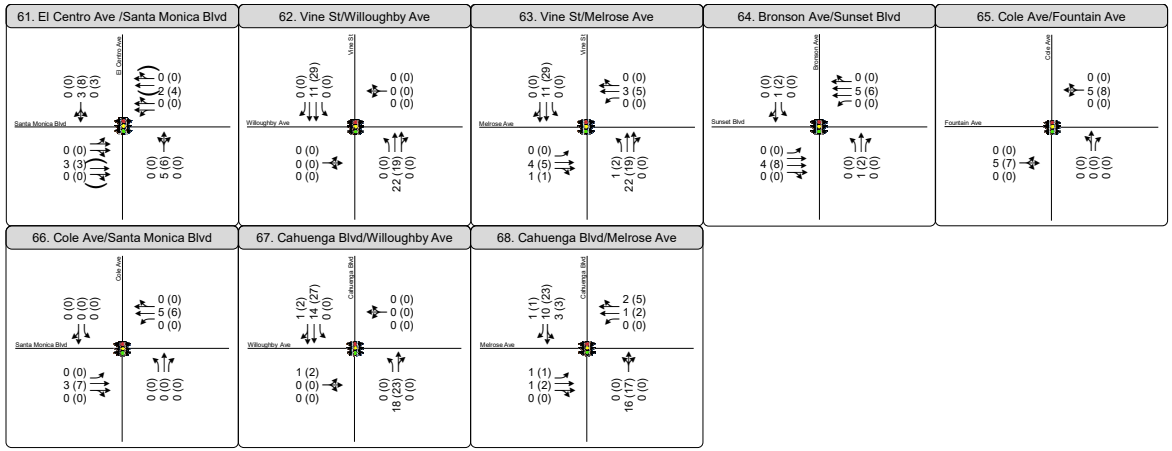


Figure C-4
Peak Hour Traffic Volumes and Lane Configurations
Project Only - Alternative 8

Attachment D - Level of Service (LOS) Worksheets

Signalized Intersections - CMA

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
7	

PROJECT TITLE: Hollywood Center
North-South Street: N Cahuenga Blvd **East-West Street:** Franklin Ave
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--		0	NB-- 0	SB--	0
	EB-- 0	WB--		0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	1	**28**	51	1	51
	Left-Through		0			0	
	Through	755	2	266	1195	2	**448**
	Through-Right		1			1	
	Right	42	0	42	150	0	150
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	94	1	94	88	1	**88**
	Left-Through		0			0	
	Through	1281	2	**641**	742	2	371
	Through-Right		0			0	
	Right	73	1	0	31	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	152	1	**152**	157	1	**157**
	Left-Through		0			0	
	Through	212	1	124	399	1	229
	Through-Right		1			1	
	Right	36	0	36	58	0	58
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	263	1	263	97	1	97
	Left-Through		0			0	
	Through	579	1	**579**	427	1	**427**
	Through-Right		0			0	
	Right	136	1	89	448	1	404
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	669		*North-South:*	536
			East-West:	731		*East-West:*	584
			SUM:	1400		*SUM:*	1120
VOLUME/CAPACITY *(V/C)* RATIO:				0.933			0.747
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.833**			**0.647**
LEVEL OF SERVICE (LOS):				**D**			**B**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
10	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Franklin Ave/US-101 NB on-ramp
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM				PM			
No. of Phases					4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					1				1
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3		SB--		2	NB-- 3		SB--	2
	EB-- 0		WB--		0	EB-- 0		WB--	0
ATSAC-1 or ATSAC+ATCS-2?					2				2
Override Capacity					0				0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	194	1	**103**	558	1	**310**
	Left-Through		1			1	
	Through	12	0	103	62	0	310
	Through-Right		0			0	
	Right	84	1	0	241	1	126
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	52	1	52	42	1	42
	Left-Through		0			0	
	Through	117	1	**93**	86	1	**76**
	Through-Right		1			1	
	Right	68	0	68	66	0	66
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	214	1	**214**	267	1	**267**
	Left-Through		0			0	
	Through	520	2	260	898	2	449
	Through-Right		0			0	
	Right	181	1	130	84	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	188	1	188	115	1	115
	Left-Through		0			0	
	Through	1451	1	**731**	1028	1	**521**
	Through-Right		1			1	
	Right	10	0	10	14	0	14
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	196		*North-South:*	386
			East-West:	945		*East-West:*	788
			SUM:	1141		*SUM:*	1174
VOLUME/CAPACITY *(V/C)* RATIO:				0.830			0.854
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.730**			**0.754**
LEVEL OF SERVICE (LOS):				**C**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center				
18	North-South Street:	Ivar Ave	East-West Street:	Yucca St		
	Scenario:	Existing (2018) + Project - Alternative 8				
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date:	1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1	SB--	0	NB-- 1	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	42	0	42	165	0	165
	Left-Through		0			0	
	Through	9	0	**143**	57	0	**380**
	Through-Right		0			0	
	Right	92	0	0	158	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	4	0	**4**	6	0	**6**
	Left-Through		0			0	
	Through	4	0	12	5	0	16
	Through-Right		0			0	
	Right	4	0	0	5	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	6	1	6	21	1	21
	Left-Through		0			0	
	Through	79	1	**79**	151	1	**151**
	Through-Right		0			0	
	Right	60	1	60	50	1	50
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	348	1	**348**	107	1	**107**
	Left-Through		0			0	
	Through	166	1	166	231	1	231
	Through-Right		0			0	
	Right	7	1	7	22	1	22
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			North-South:	147		North-South:	386
			East-West:	427		East-West:	258
			SUM:	574		SUM:	644
VOLUME/CAPACITY (V/C) RATIO:				0.383			0.429
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.283**			**0.329**
LEVEL OF SERVICE (LOS):				**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
19	

PROJECT TITLE: Hollywood Center
North-South Street: Vine St **East-West Street:** Yucca St
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	38	1	**38**	114	1	**114**
	Left-Through		0			0	
	Through	409	2	205	791	2	396
	Through-Right		0			0	
	Right	105	1	68	238	1	215
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	43	1	43	56	1	56
	Left-Through		0			0	
	Through	1155	2	**578**	1037	2	**519**
	Through-Right		0			0	
	Right	337	1	333	74	1	41
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	9	1	9	67	1	67
	Left-Through		0			0	
	Through	106	1	**106**	190	1	**190**
	Through-Right		0			0	
	Right	39	1	20	64	1	7
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	74	1	**74**	46	1	**46**
	Left-Through		0			0	
	Through	149	1	78	171	1	95
	Through-Right		1			1	
	Right	7	0	7	18	0	18
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	616		*North-South:*	633
			East-West:	180		*East-West:*	236
			SUM:	796		*SUM:*	869
VOLUME/CAPACITY *(V/C)* RATIO:				0.531			0.579
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.431**			**0.479**
LEVEL OF SERVICE (LOS):				**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
20	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Yucca St
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	40	0	**40**	72	0	72
	Left-Through		1			1	
	Through	228	0	152	730	0	**431**
	Through-Right		1			1	
	Right	35	0	152	60	0	431
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	11	0	11	7	0	**7**
	Left-Through		1			1	
	Through	292	1	**152**	173	1	101
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	126	1	**126**	272	1	**272**
	Left-Through		0			0	
	Through	49	1	49	103	1	103
	Through-Right		0			0	
	Right	94	1	94	92	1	92
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	133	1	133	44	1	44
	Left-Through		0			0	
	Through	155	0	**198**	107	0	**207**
	Through-Right		1			1	
	Right	43	0	0	100	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	192		*North-South:*	438
			East-West:	324		*East-West:*	479
			SUM:	516		*SUM:*	917
VOLUME/CAPACITY *(V/C)* RATIO:				0.344			0.611
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.244**			**0.511**
LEVEL OF SERVICE (LOS):				**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
30	

PROJECT TITLE: Hollywood Center
North-South Street: Wilcox Ave **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	12	1	**12**	79	1	79
	Left-Through		0			0	
	Through	131	0	173	361	0	**473**
	Through-Right		1			1	
	Right	42	0	0	112	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	14	0	14	15	0	**15**
	Left-Through		0			0	
	Through	350	0	**501**	243	0	304
	Through-Right		0			0	
	Right	137	0	0	46	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	13	1	**13**	62	1	62
	Left-Through		0			0	
	Through	536	1	284	758	1	**409**
	Through-Right		1			1	
	Right	32	0	32	59	0	59
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	106	1	106	76	1	**76**
	Left-Through		0			0	
	Through	1082	1	**544**	793	1	422
	Through-Right		1			1	
	Right	5	0	5	51	0	51
	Left-Through-Right		0			0	
	Left-Right		0			0	

CRITICAL VOLUMES	*North-South:*	513	*North-South:*	488
	East-West:	557	*East-West:*	485
	SUM:	1070	*SUM:*	973
VOLUME/CAPACITY *(V/C)* RATIO:		0.713		0.649
V/C LESS ATSAC/ATCS ADJUSTMENT:		**0.613**		**0.549**
LEVEL OF SERVICE (LOS):		**B**		**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
31	

PROJECT TITLE: Hollywood Center
North-South Street: Cahuenga Blvd **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	17	0	**17**	0	0	0
	Left-Through		1			0	
	Through	625	0	396	930	1	**491**
	Through-Right		1			1	
	Right	64	0	396	52	0	52
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	34	0	34	0	0	**0**
	Left-Through		1			0	
	Through	1080	0	**784**	719	1	425
	Through-Right		1			1	
	Right	351	0	784	130	0	130
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	58	1	**58**	73	1	**73**
	Left-Through		0			0	
	Through	526	1	275	711	1	374
	Through-Right		1			1	
	Right	23	0	23	36	0	36
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	72	1	72	58	1	58
	Left-Through		0			0	
	Through	850	2	**425**	730	2	**365**
	Through-Right		0			0	
	Right	29	1	29	72	1	72
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	801		*North-South:*	491
			East-West:	483		*East-West:*	438
			SUM:	1284		*SUM:*	929
VOLUME/CAPACITY *(V/C)* RATIO:				0.856			0.619
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.756**			**0.519**
LEVEL OF SERVICE (LOS):				**C**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
32	

PROJECT TITLE: Hollywood Center
North-South Street: Ivar Ave **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	**Volume**	**No. of Lanes**	**Lane Volume**	**Volume**	**No. of Lanes**	**Lane Volume**
NORTHBOUND	Left	11	0	**11**	46	0	46
	Left-Through		0			0	
	Through	60	0	111	236	0	**376**
	Through-Right		0			0	
	Right	40	0	0	94	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	29	0	29	33	0	**33**
	Left-Through		0			0	
	Through	197	0	**282**	94	0	175
	Through-Right		0			0	
	Right	56	0	0	48	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	23	1	**23**	63	1	**63**
	Left-Through		0			0	
	Through	522	1	272	708	1	370
	Through-Right		1			1	
	Right	21	0	21	32	0	32
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	90	1	90	69	1	69
	Left-Through		0			0	
	Through	923	1	**485**	847	1	**459**
	Through-Right		1			1	
	Right	47	0	47	71	0	71
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		*North-South:*	293		*North-South:*	409
			East-West:	508		*East-West:*	522
			SUM:	801		*SUM:*	931
	VOLUME/CAPACITY *(V/C)* RATIO:			0.534			0.621
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.434**			**0.521**
	LEVEL OF SERVICE (LOS):			**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
33	

PROJECT TITLE: Hollywood Center
North-South Street: Vine St **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM				PM			
No. of Phases					3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3	SB--		0	NB-- 3	SB--		0
		EB-- 3	WB--		0	EB-- 3	WB--		0
ATSAC-1 or ATSAC+ATCS-2?					2				2
Override Capacity					0				0
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	64	1	**64**		139	1	**139**	
	Left-Through		0				0		
	Through	479	2	240		1011	2	506	
	Through-Right		0				0		
	Right	80	1	0		179	1	78	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	32	1	32		61	1	61	
	Left-Through		0				0		
	Through	1094	1	**592**		1024	1	**538**	
	Through-Right		1				1		
	Right	90	0	90		52	0	52	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	15	1	**15**		62	1	**62**	
	Left-Through		0				0		
	Through	525	2	263		755	2	378	
	Through-Right		0				0		
	Right	65	1	1		102	1	0	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	101	1	101		101	1	101	
	Left-Through		0				0		
	Through	908	1	**463**		779	1	**424**	
	Through-Right		1				1		
	Right	17	0	17		69	0	69	
	Left-Through-Right		0				0		
	Left-Right		0				0		
CRITICAL VOLUMES			*North-South:*	656			*North-South:*	677	
			East-West:	478			*East-West:*	486	
			SUM:	1134			*SUM:*	1163	
VOLUME/CAPACITY *(V/C)* RATIO:				0.796				0.816	
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.696**				**0.716**	
LEVEL OF SERVICE (LOS):				**B**				**C**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
34	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 2	SB--	0	NB-- 2	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	AM Volume	AM No. of Lanes	AM Lane Volume	PM Volume	PM No. of Lanes	PM Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	0
	Left-Through		0			0	
	Through	164	0	189	459	0	**511**
	Through-Right		1			1	
	Right	25	0	0	52	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	32	0	32	100	0	**100**
	Left-Through		1			1	
	Through	231	0	**263**	198	0	298
	Through-Right		0			0	
	Right	67	1	9	125	1	47
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	116	1	**116**	157	1	**157**
	Left-Through		0			0	
	Through	469	1	274	719	1	415
	Through-Right		1			1	
	Right	79	0	79	111	0	111
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	215	1	215	112	1	112
	Left-Through		0			0	
	Through	939	1	**532**	806	1	**511**
	Through-Right		1			1	
	Right	125	0	125	215	0	215
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	263		*North-South:*	611
			East-West:	648		*East-West:*	668
			SUM:	911		*SUM:*	1279
VOLUME/CAPACITY *(V/C)* RATIO:				0.607			0.853
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.507**			**0.753**
LEVEL OF SERVICE (LOS):				**A**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
35	North-South Street:	Gower St	East-West Street:	Hollywood Blvd	
	Scenario:	Existing (2018) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM				PM			
No. of Phases					2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--		0	NB-- 0	SB--		0
		EB-- 0	WB--		0	EB-- 0	WB--		0
ATSAC-1 or ATSAC+ATCS-2?					2				2
Override Capacity					0				0
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	39	1	**39**		75	1	75	
	Left-Through		0				0		
	Through	316	1	212		691	1	**421**	
	Through-Right		1				1		
	Right	108	0	108		150	0	150	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	43	1	43		71	1	**71**	
	Left-Through		0				0		
	Through	456	1	**456**		402	1	402	
	Through-Right		0				0		
	Right	349	1	327		179	1	132	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	45	1	**45**		94	1	**94**	
	Left-Through		0				0		
	Through	451	1	253		794	1	447	
	Through-Right		1				1		
	Right	54	0	54		99	0	99	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	199	1	199		91	1	91	
	Left-Through		0				0		
	Through	886	1	**461**		876	1	**479**	
	Through-Right		1				1		
	Right	36	0	36		81	0	81	
	Left-Through-Right		0				0		
	Left-Right		0				0		
CRITICAL VOLUMES			*North-South:*	495			*North-South:*	492	
			East-West:	506			*East-West:*	573	
			SUM:	1001			*SUM:*	1065	
VOLUME/CAPACITY *(V/C)* RATIO:				0.667				0.710	
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.567**				**0.610**	
LEVEL OF SERVICE (LOS):				**A**				**B**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
36	

PROJECT TITLE: Hollywood Center
North-South Street: N Bronson Ave **East-West Street:** Hollywood Blvd
Scenario: Existing (2018) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--		0	NB-- 0	SB--	0
	EB-- 0	WB--		0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	40	1	40	68	1	68
	Left-Through		0			0	
	Through	158	0	**297**	296	0	**473**
	Through-Right		1			1	
	Right	139	0	0	177	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	81	0	**81**	74	0	**74**
	Left-Through		1			1	
	Through	247	0	328	199	0	273
	Through-Right		0			0	
	Right	147	1	118	90	1	30
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	58	1	**58**	121	1	**121**
	Left-Through		0			0	
	Through	493	1	266	800	1	431
	Through-Right		1			1	
	Right	38	0	38	62	0	62
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	164	1	164	91	1	91
	Left-Through		0			0	
	Through	1017	1	**542**	857	1	**478**
	Through-Right		1			1	
	Right	66	0	66	98	0	98
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	378		*North-South:*	547
			East-West:	600		*East-West:*	599
			SUM:	978		*SUM:*	1146
VOLUME/CAPACITY *(V/C)* RATIO:				0.652			0.764
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.552**			**0.664**
LEVEL OF SERVICE (LOS):				**A**			**B**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
37	North-South Street:	US-101 SB ramps	East-West Street:	Hollywood Blvd	
	Scenario:	Existing (2018) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	491	1	300	567	1	311
	Left-Through		0			0	
	Through	1	0	**300**	1	0	**311**
	Through-Right		0			0	
	Right	107	0	0	53	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	491	2	246	842	2	421
	Through-Right		0			0	
	Right	179	1	179	234	1	234
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	37	1	37	25	1	25
	Left-Through		0			0	
	Through	1138	2	**569**	980	2	**490**
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	300		North-South:	311
			East-West:	569		East-West:	490
			SUM:	869		SUM:	801
	VOLUME/CAPACITY (V/C) RATIO:			0.579			0.534
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.479**			**0.434**
	LEVEL OF SERVICE (LOS):			**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center				
49	North-South Street:	Ivar Ave	East-West Street:	Sunset Blvd		
	Scenario:	Existing (2018) + Project - Alternative 8				
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date:	1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	8	1	**8**	31	1	31
	Left-Through		0			0	
	Through	101	0	131	245	0	**343**
	Through-Right		1			1	
	Right	30	0	0	98	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	33	1	33	43	1	**43**
	Left-Through		0			0	
	Through	122	0	**292**	157	0	255
	Through-Right		1			1	
	Right	170	0	0	98	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	22	1	**22**	62	1	62
	Left-Through		0			0	
	Through	927	2	319	1300	2	**442**
	Through-Right		1			1	
	Right	31	0	31	27	0	27
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	25	1	25	55	1	**55**
	Left-Through		0			0	
	Through	1464	2	**518**	1210	2	423
	Through-Right		1			1	
	Right	89	0	89	58	0	58
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	300		North-South:	386
			East-West:	540		East-West:	497
			SUM:	840		SUM:	883
	VOLUME/CAPACITY (V/C) RATIO:			0.560			0.589
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.460**			**0.489**
	LEVEL OF SERVICE (LOS):			**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
7	

PROJECT TITLE: Hollywood Center
North-South Street: N Cahuenga Blvd **East-West Street:** Franklin Ave
Scenario: Future (2027) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	35	1	**35**	69	1	69
	Left-Through		0			0	
	Through	1136	2	393	1675	2	**610**
	Through-Right		1			1	
	Right	44	0	44	155	0	155
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	143	1	143	139	1	**139**
	Left-Through		0			0	
	Through	1572	2	**786**	1039	2	520
	Through-Right		0			0	
	Right	94	1	0	57	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	200	1	**200**	214	1	**214**
	Left-Through		0			0	
	Through	234	1	135	459	1	266
	Through-Right		1			1	
	Right	36	0	36	72	0	72
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	273	1	273	102	1	102
	Left-Through		0			0	
	Through	615	1	**615**	460	1	**460**
	Through-Right		0			0	
	Right	143	1	72	474	1	405
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	821		*North-South:*	749
			East-West:	815		*East-West:*	674
			SUM:	1636		*SUM:*	1423
VOLUME/CAPACITY *(V/C)* RATIO:				1.091			0.949
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.991**			**0.849**
LEVEL OF SERVICE (LOS):				**E**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
10	North-South Street:	Argyle Ave	East-West Street:	Franklin Ave/US-101 NB on-ramp
	Scenario:	Future (2027) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2019

		AM				PM			
	No. of Phases				4				4
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				1				1
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB--		2	NB-- 3	SB--		2
		EB-- 0	WB--		0	EB-- 0	WB--		0
	ATSAC-1 or ATSAC+ATCS-2?				2				2
	Override Capacity				0				0
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	458	1	**235**		887	1	**477**	
	Left-Through		1				1		
	Through	12	0	235		66	0	477	
	Through-Right		0				0		
	Right	88	1	0		250	1	120	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	54	1	54		44	1	44	
	Left-Through		0				0		
	Through	127	1	**99**		97	1	**83**	
	Through-Right		1				1		
	Right	70	0	70		68	0	68	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	248	1	**248**		317	1	**317**	
	Left-Through		0				0		
	Through	557	2	279		965	2	483	
	Through-Right		0				0		
	Right	258	1	141		138	1	0	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	213	1	213		130	1	130	
	Left-Through		0				0		
	Through	1607	1	**809**		1247	1	**631**	
	Through-Right		1				1		
	Right	10	0	10		15	0	15	
	Left-Through-Right		0				0		
	Left-Right		0				0		
	CRITICAL VOLUMES		North-South:	334			North-South:	560	
			East-West:	1057			East-West:	948	
			SUM:	1391			SUM:	1508	
	VOLUME/CAPACITY (V/C) RATIO:			1.012				1.097	
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.912**				**0.997**	
	LEVEL OF SERVICE (LOS):			**E**				**E**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center				
18	North-South Street:	Ivar Ave	East-West Street:	Yucca St		
	Scenario:	Future (2027) + Project - Alternative 8				
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date:	1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 1	SB--	0	NB-- 1	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	43	0	43	170	0	170
	Left-Through		0			0	
	Through	9	0	**146**	59	0	**391**
	Through-Right		0			0	
	Right	94	0	0	162	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	4	0	**4**	6	0	**6**
	Left-Through		0			0	
	Through	4	0	12	5	0	16
	Through-Right		0			0	
	Right	4	0	0	5	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	6	1	6	22	1	22
	Left-Through		0			0	
	Through	94	1	**94**	170	1	**170**
	Through-Right		0			0	
	Right	62	1	62	51	1	51
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	360	1	**360**	109	1	**109**
	Left-Through		0			0	
	Through	186	1	186	254	1	254
	Through-Right		0			0	
	Right	7	1	7	23	1	23
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	150		North-South:	397
			East-West:	454		East-West:	279
			SUM:	604		SUM:	676
	VOLUME/CAPACITY (V/C) RATIO:			0.403			0.451
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.303**			**0.351**
	LEVEL OF SERVICE (LOS):			**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
19	

PROJECT TITLE: Hollywood Center
North-South Street: Vine St **East-West Street:** Yucca St
Scenario: Future (2027) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM				PM			
No. of Phases					2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--		0	NB-- 0	SB--		0
		EB-- 0	WB--		0	EB-- 0	WB--		0
ATSAC-1 or ATSAC+ATCS-2?					2				2
Override Capacity					0				0
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	39	1	**39**		118	1	**118**	
	Left-Through		0				0		
	Through	460	2	230		875	2	438	
	Through-Right		0				0		
	Right	121	1	65		259	1	225	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	63	1	63		116	1	116	
	Left-Through		0				0		
	Through	1405	2	**703**		1264	2	**632**	
	Through-Right		0				0		
	Right	349	1	345		76	1	42	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	9	1	9		69	1	69	
	Left-Through		0				0		
	Through	121	1	**121**		207	1	**207**	
	Through-Right		0				0		
	Right	41	1	22		68	1	9	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	113	1	**113**		69	1	**69**	
	Left-Through		0				0		
	Through	168	1	88		190	1	105	
	Through-Right		1				1		
	Right	8	0	8		20	0	20	
	Left-Through-Right		0				0		
	Left-Right		0				0		
CRITICAL VOLUMES			*North-South:*	742			*North-South:*	750	
			East-West:	234			*East-West:*	276	
			SUM:	976			*SUM:*	1026	
VOLUME/CAPACITY *(V/C)* RATIO:				0.651				0.684	
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.551**				**0.584**	
LEVEL OF SERVICE (LOS):				**A**				**A**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
20	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Yucca St
Scenario: Future (2027) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	41	0	41	73	0	73
	Left-Through		1			1	
	Through	488	0	**314**	1062	0	**615**
	Through-Right		1			1	
	Right	57	0	314	95	0	615
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	11	0	**11**	7	0	**7**
	Left-Through		1			1	
	Through	376	1	199	223	1	133
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	155	1	**155**	307	1	**307**
	Left-Through		0			0	
	Through	50	1	50	106	1	106
	Through-Right		0			0	
	Right	112	1	112	148	1	148
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	165	1	165	71	1	71
	Left-Through		0			0	
	Through	191	0	**271**	136	0	**273**
	Through-Right		1			1	
	Right	80	0	0	137	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	325		*North-South:*	622
			East-West:	426		*East-West:*	580
			SUM:	751		*SUM:*	1202
VOLUME/CAPACITY *(V/C)* RATIO:				0.501			0.801
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.401**			**0.701**
LEVEL OF SERVICE (LOS):				**A**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
30	North-South Street:	Wilcox Ave	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	48	1	**48**	146	1	146
	Left-Through		0			0	
	Through	180	0	312	433	0	**641**
	Through-Right		1			1	
	Right	132	0	0	208	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	22	0	22	22	0	**22**
	Left-Through		0			0	
	Through	411	0	**582**	297	0	374
	Through-Right		0			0	
	Right	149	0	0	55	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	20	1	**20**	72	1	72
	Left-Through		0			0	
	Through	824	1	437	1103	1	**602**
	Through-Right		1			1	
	Right	49	0	49	101	0	101
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	136	1	136	146	1	**146**
	Left-Through		0			0	
	Through	1344	1	**679**	1183	1	623
	Through-Right		1			1	
	Right	13	0	13	62	0	62
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	630		*North-South:*	663
			East-West:	699		*East-West:*	748
			SUM:	1329		*SUM:*	1411
VOLUME/CAPACITY *(V/C)* RATIO:				0.886			0.941
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.786**			**0.841**
LEVEL OF SERVICE (LOS):				**C**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
31	North-South Street:	Cahuenga Blvd	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	18	0	**18**	0	0	0
	Left-Through		1			0	
	Through	930	0	561	1330	1	**704**
	Through-Right		1			1	
	Right	83	0	561	78	0	78
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	35	0	35	0	0	**0**
	Left-Through		1			0	
	Through	1360	0	**972**	992	1	585
	Through-Right		1			1	
	Right	374	0	972	177	0	177
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	117	1	**117**	140	1	**140**
	Left-Through		0			0	
	Through	831	1	439	1067	1	563
	Through-Right		1			1	
	Right	46	0	46	58	0	58
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	87	1	87	88	1	88
	Left-Through		0			0	
	Through	1127	2	**564**	1151	2	**576**
	Through-Right		0			0	
	Right	57	1	57	104	1	104
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	990		North-South:	704
			East-West:	681		East-West:	716
			SUM:	1671		SUM:	1420
	VOLUME/CAPACITY (V/C) RATIO:			1.114			0.947
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**1.014**			**0.847**
	LEVEL OF SERVICE (LOS):			**F**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
32	

PROJECT TITLE: Hollywood Center
North-South Street: Ivar Ave **East-West Street:** Hollywood Blvd
Scenario: Future (2027) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	20	0	**20**	66	0	66
	Left-Through		0			0	
	Through	66	0	133	251	0	**417**
	Through-Right		0			0	
	Right	47	0	0	100	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	29	0	29	34	0	**34**
	Left-Through		0			0	
	Through	211	0	**297**	103	0	186
	Through-Right		0			0	
	Right	57	0	0	49	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	23	1	**23**	64	1	**64**
	Left-Through		0			0	
	Through	833	1	437	1060	1	553
	Through-Right		1			1	
	Right	40	0	40	46	0	46
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	96	1	96	76	1	76
	Left-Through		0			0	
	Through	1228	1	**638**	1322	1	**697**
	Through-Right		1			1	
	Right	48	0	48	72	0	72
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		*North-South:*	317		*North-South:*	451
			East-West:	661		*East-West:*	761
			SUM:	978		*SUM:*	1212
	VOLUME/CAPACITY *(V/C)* RATIO:			0.652			0.808
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.552**			**0.708**
	LEVEL OF SERVICE (LOS):			**A**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
33	North-South Street:	Vine St	East-West Street:	Hollywood Blvd
	Scenario:	Future (2027) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2019

		AM			PM		
No. of Phases				0			0
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3	SB--	0	NB-- 3	SB--	0
		EB-- 3	WB--	0	EB-- 3	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				1325			1325
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	79	1	**79**	166	1	**166**
	Left-Through		0			0	
	Through	537	2	269	1099	2	550
	Through-Right		0			0	
	Right	188	1	19	266	1	68
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	85	1	85	112	1	112
	Left-Through		0			0	
	Through	1309	1	**704**	1210	1	**642**
	Through-Right		1			1	
	Right	98	0	98	73	0	73
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	22	1	**22**	74	1	74
	Left-Through		0			0	
	Through	830	2	415	1080	2	**540**
	Through-Right		0			0	
	Right	73	1	0	126	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	169	1	169	198	1	**198**
	Left-Through		0			0	
	Through	1197	1	**611**	1214	1	645
	Through-Right		1			1	
	Right	24	0	24	75	0	75
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			North-South:	783		North-South:	808
			East-West:	633		East-West:	738
			SUM:	1416		SUM:	1546
VOLUME/CAPACITY (V/C) RATIO:				1.069			1.167
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.969**			**1.067**
LEVEL OF SERVICE (LOS):				**E**			**F**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
34	North-South Street:	Argyle Ave	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

	AM			PM		
No. of Phases			2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 2	SB--	0	NB-- 2	SB--	0
	EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2
Override Capacity			0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	55	1	55	56	1	56
	Left-Through		0			0	
	Through	398	1	**398**	738	1	**738**
	Through-Right		0			0	
	Right	46	1	46	67	1	67
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	95	1	**95**	118	1	**118**
	Left-Through		0			0	
	Through	358	1	358	329	1	329
	Through-Right		0			0	
	Right	83	1	18	133	1	23
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	130	1	**130**	220	1	**220**
	Left-Through		0			0	
	Through	782	1	438	1182	1	661
	Through-Right		1			1	
	Right	93	0	93	139	0	139
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	233	1	233	136	1	136
	Left-Through		0			0	
	Through	1348	1	**745**	1244	1	**752**
	Through-Right		1			1	
	Right	142	0	142	260	0	260
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	493		*North-South:*	856
			East-West:	875		*East-West:*	972
			SUM:	1368		*SUM:*	1828
VOLUME/CAPACITY *(V/C)* RATIO:				0.912			1.219
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.812**			**1.119**
LEVEL OF SERVICE (LOS):				**D**			**F**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
35	North-South Street:	Gower St	East-West Street:	Hollywood Blvd
	Scenario:	Future (2027) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	65	1	**65**	83	1	**83**
	Left-Through		0			0	
	Through	420	1	302	845	1	566
	Through-Right		1			1	
	Right	183	0	183	286	0	286
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	68	1	68	103	1	103
	Left-Through		0			0	
	Through	595	1	**595**	588	1	**588**
	Through-Right		0			0	
	Right	389	1	362	224	1	170
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	55	1	55	108	1	108
	Left-Through		0			0	
	Through	871	1	**473**	1280	1	**709**
	Through-Right		1			1	
	Right	74	0	74	138	0	138
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	330	1	**330**	220	1	**220**
	Left-Through		0			0	
	Through	1253	1	653	1421	1	765
	Through-Right		1			1	
	Right	53	0	53	109	0	109
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	660		*North-South:*	671
			East-West:	803		*East-West:*	929
			SUM:	1463		*SUM:*	1600
VOLUME/CAPACITY *(V/C)* RATIO:				0.975			1.067
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.875**			**0.967**
LEVEL OF SERVICE (LOS):				**D**			**E**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
36	North-South Street:	N Bronson Ave	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	50	1	50	97	1	97
	Left-Through		0			0	
	Through	215	0	**379**	399	0	**595**
	Through-Right		1			1	
	Right	164	0	0	196	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	84	0	**84**	77	0	**77**
	Left-Through		1			1	
	Through	266	0	350	226	0	303
	Through-Right		0			0	
	Right	162	1	132	95	1	29
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	61	1	**61**	133	1	**133**
	Left-Through		0			0	
	Through	996	1	528	1425	1	752
	Through-Right		1			1	
	Right	60	0	60	79	0	79
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	180	1	180	114	1	114
	Left-Through		0			0	
	Through	1513	1	**791**	1551	1	**827**
	Through-Right		1			1	
	Right	68	0	68	102	0	102
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	463		North-South:	672
			East-West:	852		East-West:	960
			SUM:	1315		SUM:	1632
	VOLUME/CAPACITY (V/C) RATIO:			0.877			1.088
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.777**			**0.988**
	LEVEL OF SERVICE (LOS):			**C**			**E**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
37	North-South Street:	US-101 SB ramps	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2019

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	539	1	330	628	1	355
	Left-Through		0			0	
	Through	1	0	**330**	1	0	**355**
	Through-Right		0			0	
	Right	119	0	0	80	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	784	2	392	1197	2	599
	Through-Right		0			0	
	Right	416	1	416	526	1	526
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	65	1	65	46	1	46
	Left-Through		0			0	
	Through	1640	2	**820**	1674	2	**837**
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	330		North-South:	355
			East-West:	820		East-West:	837
			SUM:	1150		SUM:	1192
	VOLUME/CAPACITY (V/C) RATIO:			0.767			0.795
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.667**			**0.695**
	LEVEL OF SERVICE (LOS):			**B**			**B**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
49	

PROJECT TITLE: Hollywood Center
North-South Street: Ivar Ave **East-West Street:** Sunset Blvd
Scenario: Future (2027) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2019

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	8	1	**8**	32	1	32
	Left-Through		0			0	
	Through	115	0	146	276	0	**378**
	Through-Right		1			1	
	Right	31	0	0	102	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	37	1	37	48	1	**48**
	Left-Through		0			0	
	Through	150	0	**326**	179	0	280
	Through-Right		1			1	
	Right	176	0	0	101	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	23	1	**23**	64	1	**64**
	Left-Through		0			0	
	Through	1450	2	494	1994	2	674
	Through-Right		1			1	
	Right	32	0	32	28	0	28
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	26	1	26	57	1	57
	Left-Through		0			0	
	Through	2046	2	**713**	2059	2	**708**
	Through-Right		1			1	
	Right	94	0	94	66	0	66
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	334		*North-South:*	426
			East-West:	736		*East-West:*	772
			SUM:	1070		*SUM:*	1198
VOLUME/CAPACITY *(V/C)* RATIO:				0.713			0.799
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.613**			**0.699**
LEVEL OF SERVICE (LOS):				**B**			**B**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
7	

PROJECT TITLE: Hollywood Center
North-South Street: N Cahuenga Blvd **East-West Street:** Franklin Ave
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--		0	NB-- 0	SB--	0
	EB-- 0	WB--		0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	36	1	**36**	71	1	71
	Left-Through		0			0	
	Through	1174	2	407	1734	2	**632**
	Through-Right		1			1	
	Right	46	0	46	163	0	163
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	147	1	147	143	1	**143**
	Left-Through		0			0	
	Through	1637	2	**819**	1076	2	538
	Through-Right		0			0	
	Right	97	1	0	59	1	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	208	1	**208**	222	1	**222**
	Left-Through		0			0	
	Through	245	1	142	480	1	278
	Through-Right		1			1	
	Right	38	0	38	75	0	75
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	287	1	287	108	1	108
	Left-Through		0			0	
	Through	645	1	**645**	482	1	**482**
	Through-Right		0			0	
	Right	150	1	77	497	1	426
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	855		*North-South:*	775
			East-West:	853		*East-West:*	704
			SUM:	1708		*SUM:*	1479
VOLUME/CAPACITY *(V/C)* RATIO:				1.139			0.986
V/C LESS ATSAC/ATCS ADJUSTMENT:				**1.039**			**0.886**
LEVEL OF SERVICE (LOS):				**F**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
10	North-South Street:	Argyle Ave	East-West Street:	Franklin Ave/US-101 NB on-ramp
	Scenario:	Future (2040) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2018

		AM				PM			
	No. of Phases				4				4
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				1				1
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB--		2	NB-- 3	SB--		2
		EB-- 0	WB--		0	EB-- 0	WB--		0
	ATSAC-1 or ATSAC+ATCS-2?				2				2
	Override Capacity				0				0
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	468	1	**241**		914	1	**492**	
	Left-Through		1				1		
	Through	13	0	241		69	0	492	
	Through-Right		0				0		
	Right	91	1	0		260	1	125	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	57	1	57		46	1	46	
	Left-Through		0				0		
	Through	133	1	**104**		101	1	**87**	
	Through-Right		1				1		
	Right	74	0	74		72	0	72	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	259	1	**259**		330	1	**330**	
	Left-Through		0				0		
	Through	584	2	292		1012	2	506	
	Through-Right		0				0		
	Right	265	1	145		141	1	0	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	221	1	221		135	1	135	
	Left-Through		0				0		
	Through	1683	1	**847**		1300	1	**658**	
	Through-Right		1				1		
	Right	11	0	11		15	0	15	
	Left-Through-Right		0				0		
	Left-Right		0				0		
	CRITICAL VOLUMES		North-South:	345			North-South:	579	
			East-West:	1106			East-West:	988	
			SUM:	1451			SUM:	1567	
	VOLUME/CAPACITY (V/C) RATIO:			1.055				1.140	
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.955**				**1.040**	
	LEVEL OF SERVICE (LOS):			**E**				**F**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
18	

PROJECT TITLE: Hollywood Center
North-South Street: Ivar Ave **East-West Street:** Yucca St
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 1	SB--	0	NB-- 1	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	44	0	44	178	0	178
	Left-Through		0			0	
	Through	10	0	**150**	62	0	**408**
	Through-Right		0			0	
	Right	96	0	0	168	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	4	0	**4**	7	0	**7**
	Left-Through		0			0	
	Through	4	0	12	5	0	17
	Through-Right		0			0	
	Right	4	0	0	5	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	7	1	7	23	1	23
	Left-Through		0			0	
	Through	98	1	**98**	177	1	**177**
	Through-Right		0			0	
	Right	64	1	64	52	1	52
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	377	1	**377**	112	1	**112**
	Left-Through		0			0	
	Through	194	1	194	264	1	264
	Through-Right		0			0	
	Right	8	1	8	24	1	24
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	154		*North-South:*	415
			East-West:	475		*East-West:*	289
			SUM:	629		*SUM:*	704
VOLUME/CAPACITY *(V/C)* RATIO:				0.419			0.469
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.319**			**0.369**
LEVEL OF SERVICE (LOS):				**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
19	North-South Street:	Vine St	East-West Street:	Yucca St
	Scenario:	Future (2040) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2018

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	41	1	**41**	124	1	**124**
	Left-Through		0			0	
	Through	481	2	241	917	2	459
	Through-Right		0			0	
	Right	126	1	68	271	1	236
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	65	1	65	119	1	119
	Left-Through		0			0	
	Through	1465	2	**733**	1318	2	**659**
	Through-Right		0			0	
	Right	366	1	361	79	1	43
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	10	1	10	73	1	73
	Left-Through		0			0	
	Through	124	1	**124**	215	1	**215**
	Through-Right		0			0	
	Right	43	1	23	71	1	9
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	117	1	**117**	71	1	**71**
	Left-Through		0			0	
	Through	175	1	92	195	1	108
	Through-Right		1			1	
	Right	9	0	9	20	0	20
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	774		North-South:	783
			East-West:	241		East-West:	286
			SUM:	1015		SUM:	1069
	VOLUME/CAPACITY (V/C) RATIO:			0.677			0.713
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.577**			**0.613**
	LEVEL OF SERVICE (LOS):			**A**			**B**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
20	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Yucca St
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	43	0	43	75	0	75
	Left-Through		1			1	
	Through	499	0	**322**	1095	0	**634**
	Through-Right		1			1	
	Right	59	0	322	97	0	634
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	12	0	**12**	8	0	**8**
	Left-Through		1			1	
	Through	388	1	206	230	1	139
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	160	1	**160**	320	1	**320**
	Left-Through		0			0	
	Through	53	1	53	111	1	111
	Through-Right		0			0	
	Right	116	1	116	152	1	152
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	170	1	170	72	1	72
	Left-Through		0			0	
	Through	199	0	**281**	140	0	**282**
	Through-Right		1			1	
	Right	82	0	0	142	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	334		*North-South:*	642
			East-West:	441		*East-West:*	602
			SUM:	775		*SUM:*	1244
VOLUME/CAPACITY *(V/C)* RATIO:				0.517			0.829
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.417**			**0.729**
LEVEL OF SERVICE (LOS):				**A**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
30	

PROJECT TITLE: Hollywood Center
North-South Street: Wilcox Ave **East-West Street:** Hollywood Blvd
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	49	1	**49**	150	1	150
	Left-Through		0			0	
	Through	187	0	321	452	0	**665**
	Through-Right		1			1	
	Right	134	0	0	213	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	23	0	23	23	0	**23**
	Left-Through		0			0	
	Through	429	0	**608**	309	0	389
	Through-Right		0			0	
	Right	156	0	0	57	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	21	1	**21**	75	1	75
	Left-Through		0			0	
	Through	850	1	451	1140	1	**622**
	Through-Right		1			1	
	Right	51	0	51	104	0	104
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	141	1	141	150	1	**150**
	Left-Through		0			0	
	Through	1399	1	**706**	1222	1	643
	Through-Right		1			1	
	Right	13	0	13	64	0	64
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	657		*North-South:*	688
			East-West:	727		*East-West:*	772
			SUM:	1384		*SUM:*	1460
VOLUME/CAPACITY *(V/C)* RATIO:				0.923			0.973
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.823**			**0.873**
LEVEL OF SERVICE (LOS):				**D**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
31	

PROJECT TITLE: Hollywood Center
North-South Street: Cahuenga Blvd **East-West Street:** Hollywood Blvd
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--		0	NB-- 0	SB--	0
	EB-- 0	WB--		0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	18	0	**18**	0	0	0
	Left-Through		1			0	
	Through	960	0	577	1379	1	**730**
	Through-Right		1			1	
	Right	86	0	577	80	0	80
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	37	0	37	0	0	**0**
	Left-Through		1			0	
	Through	1416	0	**1016**	1029	1	607
	Through-Right		1			1	
	Right	393	0	1016	184	0	184
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	120	1	**120**	144	1	**144**
	Left-Through		0			0	
	Through	856	1	452	1102	1	581
	Through-Right		1			1	
	Right	47	0	47	60	0	60
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	90	1	90	91	1	91
	Left-Through		0			0	
	Through	1170	2	**585**	1187	2	**594**
	Through-Right		0			0	
	Right	59	1	59	107	1	107
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	1034		*North-South:*	730
			East-West:	705		*East-West:*	738
			SUM:	1739		*SUM:*	1468
VOLUME/CAPACITY *(V/C)* RATIO:				1.159			0.979
V/C LESS ATSAC/ATCS ADJUSTMENT:				**1.059**			**0.879**
LEVEL OF SERVICE (LOS):				**F**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
32	North-South Street:	Ivar Ave	East-West Street:	Hollywood Blvd
	Scenario:	Future (2040) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	21	0	**21**	68	0	68
	Left-Through		0			0	
	Through	68	0	138	261	0	**434**
	Through-Right		0			0	
	Right	49	0	0	105	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
SOUTHBOUND	Left	30	0	30	34	0	**34**
	Left-Through		0			0	
	Through	219	0	**308**	106	0	190
	Through-Right		0			0	
	Right	59	0	0	50	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	24	1	**24**	66	1	**66**
	Left-Through		0			0	
	Through	859	1	450	1095	1	572
	Through-Right		1			1	
	Right	41	0	41	48	0	48
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	101	1	101	79	1	79
	Left-Through		0			0	
	Through	1275	1	**663**	1363	1	**719**
	Through-Right		1			1	
	Right	50	0	50	74	0	74
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			North-South:	329		North-South:	468
			East-West:	687		East-West:	785
			SUM:	1016		SUM:	1253
VOLUME/CAPACITY (V/C) RATIO:				0.677			0.835
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.577**			**0.735**
LEVEL OF SERVICE (LOS):				**A**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
33	North-South Street:	Vine St	East-West Street:	Hollywood Blvd
	Scenario:	Future (2040) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2018

		AM				PM			
No. of Phases					0				0
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 3	SB--		0	NB-- 3	SB--		0
		EB-- 3	WB--		0	EB-- 3	WB--		0
ATSAC-1 or ATSAC+ATCS-2?					2				2
Override Capacity					1325				1325
	MOVEMENT	Volume	No. of Lanes	Lane Volume		Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	82	1	**82**		172	1	**172**	
	Left-Through		0				0		
	Through	561	2	281		1151	2	576	
	Through-Right		0				0		
	Right	191	1	17		275	1	73	
	Left-Through-Right		0				0		
	Left-Right		0				0		
SOUTHBOUND	Left	87	1	87		115	1	115	
	Left-Through		0				0		
	Through	1366	1	**735**		1263	1	**670**	
	Through-Right		1				1		
	Right	103	0	103		76	0	76	
	Left-Through-Right		0				0		
	Left-Right		0				0		
EASTBOUND	Left	22	1	**22**		77	1	77	
	Left-Through		0				0		
	Through	854	2	427		1117	2	**559**	
	Through-Right		0				0		
	Right	77	1	0		131	1	0	
	Left-Through-Right		0				0		
	Left-Right		0				0		
WESTBOUND	Left	174	1	174		202	1	**202**	
	Left-Through		0				0		
	Through	1243	1	**634**		1250	1	665	
	Through-Right		1				1		
	Right	24	0	24		79	0	79	
	Left-Through-Right		0				0		
	Left-Right		0				0		
CRITICAL VOLUMES			North-South:	817			North-South:	842	
			East-West:	656			East-West:	761	
			SUM:	1473			SUM:	1603	
VOLUME/CAPACITY (V/C) RATIO:				1.112				1.210	
V/C LESS ATSAC/ATCS ADJUSTMENT:				**1.012**				**1.110**	
LEVEL OF SERVICE (LOS):				**F**				**F**	

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	
34	

PROJECT TITLE: Hollywood Center
North-South Street: Argyle Ave **East-West Street:** Hollywood Blvd
Scenario: Future (2040) + Project - Alternative 8
Count Date: 6/28/2018 **Analyst:** Fehr & Peers **Date:** 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 2	SB--	0	NB-- 2	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	57	1	57	58	1	58
	Left-Through		0			0	
	Through	405	1	**405**	761	1	**761**
	Through-Right		0			0	
	Right	47	1	47	70	1	70
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	98	1	**98**	120	1	**120**
	Left-Through		0			0	
	Through	370	1	370	337	1	337
	Through-Right		0			0	
	Right	85	1	18	135	1	22
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	134	1	**134**	226	1	**226**
	Left-Through		0			0	
	Through	806	1	452	1219	1	682
	Through-Right		1			1	
	Right	97	0	97	145	0	145
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	244	1	244	142	1	142
	Left-Through		0			0	
	Through	1397	1	**771**	1285	1	**778**
	Through-Right		1			1	
	Right	145	0	145	270	0	270
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	503		*North-South:*	881
			East-West:	905		*East-West:*	1004
			SUM:	1408		*SUM:*	1885
VOLUME/CAPACITY *(V/C)* RATIO:				0.939			1.257
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.839**			**1.157**
LEVEL OF SERVICE (LOS):				**D**			**F**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center		
35	North-South Street:	Gower St	East-West Street:	Hollywood Blvd
	Scenario:	Future (2040) + Project - Alternative 8		
	Count Date:	6/28/2018	Analyst: Fehr & Peers	Date: 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	66	1	**66**	87	1	**87**
	Left-Through		0			0	
	Through	437	1	313	881	1	588
	Through-Right		1			1	
	Right	189	0	189	294	0	294
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	70	1	70	106	1	106
	Left-Through		0			0	
	Through	619	1	**619**	609	1	**609**
	Through-Right		0			0	
	Right	407	1	379	234	1	178
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	57	1	57	113	1	113
	Left-Through		0			0	
	Through	893	1	**485**	1318	1	**730**
	Through-Right		1			1	
	Right	76	0	76	142	0	142
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	341	1	**341**	225	1	**225**
	Left-Through		0			0	
	Through	1297	1	676	1464	1	789
	Through-Right		1			1	
	Right	55	0	55	113	0	113
	Left-Through-Right		0			0	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	685		*North-South:*	696
			East-West:	826		*East-West:*	955
			SUM:	1511		*SUM:*	1651
VOLUME/CAPACITY *(V/C)* RATIO:				1.007			1.101
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.907**			**1.001**
LEVEL OF SERVICE (LOS):				**E**			**F**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
36	North-South Street:	N Bronson Ave	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2040) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2018

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	52	1	52	101	1	101
	Left-Through		0			0	
	Through	223	0	**394**	414	0	**620**
	Through-Right		1			1	
	Right	171	0	0	206	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	88	0	**88**	81	0	**81**
	Left-Through		1			1	
	Through	279	0	367	237	0	318
	Through-Right		0			0	
	Right	170	1	138	100	1	30
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	64	1	**64**	140	1	**140**
	Left-Through		0			0	
	Through	1020	1	541	1463	1	773
	Through-Right		1			1	
	Right	62	0	62	82	0	82
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	188	1	188	119	1	119
	Left-Through		0			0	
	Through	1563	1	**818**	1593	1	**850**
	Through-Right		1			1	
	Right	72	0	72	107	0	107
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	482		North-South:	701
			East-West:	882		East-West:	990
			SUM:	1364		SUM:	1691
	VOLUME/CAPACITY (V/C) RATIO:			0.909			1.127
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.809**			**1.027**
	LEVEL OF SERVICE (LOS):			**D**			**F**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
37	North-South Street:	US-101 SB ramps	East-West Street:	Hollywood Blvd	
	Scenario:	Future (2040) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2018

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	564	1	345	658	1	371
	Left-Through		0			0	
	Through	1	0	**345**	1	0	**371**
	Through-Right		0			0	
	Right	124	0	0	83	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
EASTBOUND	Left	0	0	**0**	0	0	**0**
	Left-Through		0			0	
	Through	809	2	405	1239	2	620
	Through-Right		0			0	
	Right	425	1	425	537	1	537
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	67	1	67	47	1	47
	Left-Through		0			0	
	Through	1697	2	**849**	1723	2	**862**
	Through-Right		0			0	
	Right	0	0	0	0	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		North-South:	345		North-South:	371
			East-West:	849		East-West:	862
			SUM:	1194		SUM:	1233
	VOLUME/CAPACITY (V/C) RATIO:			0.796			0.822
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.696**			**0.722**
	LEVEL OF SERVICE (LOS):			**B**			**C**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center				
49	North-South Street:	Ivar Ave	East-West Street:	Sunset Blvd		
	Scenario:	Future (2040) + Project - Alternative 8				
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date:	1/9/2018

		AM			PM		
	No. of Phases			2			2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
	ATSAC-1 or ATSAC+ATCS-2?			2			2
	Override Capacity			0			0
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	9	1	**9**	34	1	34
	Left-Through		0			0	
	Through	119	0	152	286	0	**393**
	Through-Right		1			1	
	Right	33	0	0	107	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	39	1	39	51	1	**51**
	Left-Through		0			0	
	Through	155	0	**340**	185	0	291
	Through-Right		1			1	
	Right	185	0	0	106	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	24	1	**24**	67	1	**67**
	Left-Through		0			0	
	Through	1498	2	511	2061	2	697
	Through-Right		1			1	
	Right	34	0	34	29	0	29
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	27	1	27	60	1	60
	Left-Through		0			0	
	Through	2122	2	**740**	2122	2	**730**
	Through-Right		1			1	
	Right	99	0	99	69	0	69
	Left-Through-Right		0			0	
	Left-Right		0			0	
	CRITICAL VOLUMES		*North-South:*	349		*North-South:*	444
			East-West:	764		*East-West:*	797
			SUM:	1113		*SUM:*	1241
	VOLUME/CAPACITY *(V/C)* RATIO:			0.742			0.827
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.642**			**0.727**
	LEVEL OF SERVICE (LOS):			**B**			**C**

Version: 1i Beta; 8/4/2011

Unsignalized Intersections - HCM

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	285	110	99	389	5
Future Vol, veh/h	0	0	0	0	0	0	0	285	110	99	389	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	310	120	108	423	5

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	-	-	214			-	0	0	430	0	0
Stage 1	-	-	-			-	-	-	-	-	-
Stage 2	-	-	-			-	-	-	-	-	-
Critical Hdwy	-	-	6.94			-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-			-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-			-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32			-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	791			0	-	-	1126	-	-
Stage 1	0	0	-			0	-	-	-	-	-
Stage 2	0	0	-			0	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	-	0	791			-	-	-	1126	-	-
Mov Cap-2 Maneuver	-	0	-			-	-	-	-	-	-
Stage 1	-	0	-			-	-	-	-	-	-
Stage 2	-	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	1126	-	-
HCM Lane V/C Ratio	-	-	-	0.096	-	-
HCM Control Delay (s)	-	-	0	8.5	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	897	208	51	218	14
Future Vol, veh/h	0	0	0	0	0	0	0	897	208	51	218	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	975	226	55	237	15

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	-	-	126				-	0	0	1201	0	0
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	-	-	-
Critical Hdwy	-	-	6.94				-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32				-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	901				0	-	-	577	-	-
Stage 1	0	0	-				0	-	-	-	-	-
Stage 2	0	0	-				0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	901				-	-	-	577	-	-
Mov Cap-2 Maneuver	-	0	-				-	-	-	-	-	-
Stage 1	-	0	-				-	-	-	-	-	-
Stage 2	-	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	577	-	-
HCM Lane V/C Ratio	-	-	-	0.096	-	-
HCM Control Delay (s)	-	-	0	11.9	-	-
HCM Lane LOS	-	-	A	B	-	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	554	172	105	496	5
Future Vol, veh/h	0	0	0	0	0	0	0	554	172	105	496	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	602	187	114	539	5

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	-	-	272				-	0	0	789	0	0
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	-	-	-
Critical Hdwy	-	-	6.94				-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32				-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	726				0	-	-	827	-	-
Stage 1	0	0	-				0	-	-	-	-	-
Stage 2	0	0	-				0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	726				-	-	-	827	-	-
Mov Cap-2 Maneuver	-	0	-				-	-	-	-	-	-
Stage 1	-	0	-				-	-	-	-	-	-
Stage 2	-	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	827	-	-
HCM Lane V/C Ratio	-	-	-	0.138	-	-
HCM Control Delay (s)	-	-	0	10	-	-
HCM Lane LOS	-	-	A	B	-	-
HCM 95th %tile Q(veh)	-	-	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1239	272	67	282	14
Future Vol, veh/h	0	0	0	0	0	0	0	1239	272	67	282	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	1347	296	73	307	15

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	-	-	161				-	0	0	1643	0	0
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	-	-	-
Critical Hdwy	-	-	6.94				-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32				-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	855				0	-	-	390	-	-
Stage 1	0	0	-				0	-	-	-	-	-
Stage 2	0	0	-				0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	855				-	-	-	390	-	-
Mov Cap-2 Maneuver	-	0	-				-	-	-	-	-	-
Stage 1	-	0	-				-	-	-	-	-	-
Stage 2	-	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	390	-	-
HCM Lane V/C Ratio	-	-	-	0.187	-	-
HCM Control Delay (s)	-	-	0	16.3	-	-
HCM Lane LOS	-	-	A	C	-	-
HCM 95th %tile Q(veh)	-	-	-	0.7	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	568	177	110	512	5
Future Vol, veh/h	0	0	0	0	0	0	0	568	177	110	512	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	617	192	120	557	5

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	-	-	281				-	0	0	809	0	0
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	-	-	-
Critical Hdwy	-	-	6.94				-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32				-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	716				0	-	-	812	-	-
Stage 1	0	0	-				0	-	-	-	-	-
Stage 2	0	0	-				0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	716				-	-	-	812	-	-
Mov Cap-2 Maneuver	-	0	-				-	-	-	-	-	-
Stage 1	-	0	-				-	-	-	-	-	-
Stage 2	-	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	812	-	-
HCM Lane V/C Ratio	-	-	-	0.147	-	-
HCM Control Delay (s)	-	-	0	10.2	-	-
HCM Lane LOS	-	-	A	B	-	-
HCM 95th %tile Q(veh)	-	-	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	1282	281	69	291	14
Future Vol, veh/h	0	0	0	0	0	0	0	1282	281	69	291	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	1393	305	75	316	15

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	-	-	166				-	0	0	1698	0	0
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	-	-	-
Critical Hdwy	-	-	6.94				-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-				-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32				-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	849				0	-	-	371	-	-
Stage 1	0	0	-				0	-	-	-	-	-
Stage 2	0	0	-				0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	849				-	-	-	371	-	-
Mov Cap-2 Maneuver	-	0	-				-	-	-	-	-	-
Stage 1	-	0	-				-	-	-	-	-	-
Stage 2	-	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	3.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	371	-	-
HCM Lane V/C Ratio	-	-	-	0.202	-	-
HCM Control Delay (s)	-	-	0	17.1	-	-
HCM Lane LOS	-	-	A	C	-	-
HCM 95th %tile Q(veh)	-	-	-	0.7	-	-

Unsignalized Driveways - HCM

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	299	10	2	282	1	1
Future Vol, veh/h	299	10	2	282	1	1
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	325	11	2	307	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	338	0	485	327
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	158	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1220	-	526	713
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1218	-	524	712
Mov Cap-2 Maneuver	-	-	-	-	524	-
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	853	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	604	-	-	1218	-
HCM Lane V/C Ratio	0.004	-	-	0.002	-
HCM Control Delay (s)	11	-	-	8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	69	88	49	34	385
Future Vol, veh/h	82	69	88	49	34	385
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	75	96	53	37	418

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	620	128	0	0	154	0
Stage 1	128	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	452	922	-	-	1426	-
Stage 1	898	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	435	918	-	-	1420	-
Mov Cap-2 Maneuver	435	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	594	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	573	1420	-
HCM Lane V/C Ratio	-	-	0.286	0.026	-
HCM Control Delay (s)	-	-	13.8	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	60	42	0	282	6	6
Future Vol, veh/h	60	42	0	282	6	6
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	46	0	307	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	113	0	221	67
Stage 1	-	-	-	-	67	-
Stage 2	-	-	-	-	154	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1475	-	757	996
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	859	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1473	-	755	994
Mov Cap-2 Maneuver	-	-	-	-	755	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	859	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	858	-	-	1473	-
HCM Lane V/C Ratio	0.015	-	-	-	-
HCM Control Delay (s)	9.3	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	66	259	120	87	82
Future Vol, veh/h	77	66	259	120	87	82
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	72	282	130	95	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	631	352	0	0	417	0
Stage 1	352	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	445	692	-	-	1142	-
Stage 1	712	-	-	-	-	-
Stage 2	768	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	404	689	-	-	1137	-
Mov Cap-2 Maneuver	404	-	-	-	-	-
Stage 1	709	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	4.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	499	1137	-
HCM Lane V/C Ratio	-	-	0.311	0.083	-
HCM Control Delay (s)	-	-	15.4	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.3	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	350	10	2	343	1	1
Future Vol, veh/h	350	10	2	343	1	1
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	380	11	2	373	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	393	0	573	382
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	191	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1164	-	465	664
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1162	-	463	663
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	821	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	545	-	-	1162	-
HCM Lane V/C Ratio	0.004	-	-	0.002	-
HCM Control Delay (s)	11.6	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	69	95	49	34	407
Future Vol, veh/h	82	69	95	49	34	407
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	75	103	53	37	442

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	651	135	0	0	161	0
Stage 1	135	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	433	914	-	-	1418	-
Stage 1	891	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	416	910	-	-	1412	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	553	1412	-
HCM Lane V/C Ratio	-	-	0.297	0.026	-
HCM Control Delay (s)	-	-	14.2	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	44	0	327	6	6
Future Vol, veh/h	144	44	0	327	6	6
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	48	0	355	7	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	207	0	337	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	178	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1363	-	646	886
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1361	-	645	885
Mov Cap-2 Maneuver	-	-	-	-	645	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	835	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	746	-	-	1361	-
HCM Lane V/C Ratio	0.017	-	-	-	-
HCM Control Delay (s)	9.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	66	276	120	87	92
Future Vol, veh/h	77	66	276	120	87	92
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	72	300	130	95	100

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	660	370	0	0	435	0
Stage 1	370	-	-	-	-	-
Stage 2	290	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	428	676	-	-	1125	-
Stage 1	699	-	-	-	-	-
Stage 2	759	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	388	673	-	-	1120	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	691	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	4.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	482	1120	-
HCM Lane V/C Ratio	-	-	0.322	0.084	-
HCM Control Delay (s)	-	-	16	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.3	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	69	100	49	34	427
Future Vol, veh/h	82	69	100	49	34	427
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	75	109	53	37	464

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	679	141	0	0	167	0
Stage 1	141	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	417	907	-	-	1411	-
Stage 1	886	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	401	903	-	-	1405	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	538	1405	-
HCM Lane V/C Ratio	-	-	0.305	0.026	-
HCM Control Delay (s)	-	-	14.6	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	363	11	2	356	1	1
Future Vol, veh/h	363	11	2	356	1	1
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	395	12	2	387	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	409	0	595	397
Stage 1	-	-	-	-	397	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1148	-	451	652
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1146	-	449	651
Mov Cap-2 Maneuver	-	-	-	-	449	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	815	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	531	-	-	1146	-
HCM Lane V/C Ratio	0.004	-	-	0.002	-
HCM Control Delay (s)	11.8	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	69	100	49	34	427
Future Vol, veh/h	82	69	100	49	34	427
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	75	109	53	37	464

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	679	141	0	0	167	0
Stage 1	141	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	417	907	-	-	1411	-
Stage 1	886	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	401	903	-	-	1405	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	882	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	538	1405	-
HCM Lane V/C Ratio	-	-	0.305	0.026	-
HCM Control Delay (s)	-	-	14.6	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	46	0	339	7	7
Future Vol, veh/h	144	46	0	339	7	7
Conflicting Peds, #/hr	0	2	2	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	45	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	50	0	368	8	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	209	0	343	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	184	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	1360	-	640	886
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	830	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1358	-	639	885
Mov Cap-2 Maneuver	-	-	-	-	639	-
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	830	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	742	-	-	1358	-
HCM Lane V/C Ratio	0.021	-	-	-	-
HCM Control Delay (s)	10	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	66	290	120	87	96
Future Vol, veh/h	77	66	290	120	87	96
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	72	315	130	95	104

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	679	385	0	0	450	0
Stage 1	385	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	417	663	-	-	1110	-
Stage 1	688	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	377	660	-	-	1105	-
Mov Cap-2 Maneuver	377	-	-	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	4.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	470	1105	-
HCM Lane V/C Ratio	-	-	0.331	0.086	-
HCM Control Delay (s)	-	-	16.4	8.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.3	-

Signalized Driveways - CMA

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center				
896	North-South Street:	Argyle Ave	East-West Street:	East Site Driveway		
	Scenario:	Existing (2018) + Project - Alternative 8				
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date:	1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0
MOVEMENT		Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	155	1	**155**	121	1	121
	Left-Through		0			0	
	Through	269	0	274	731	0	**780**
	Through-Right		1			1	
	Right	5	0	0	49	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	6	1	6	21	1	**21**
	Left-Through		0			0	
	Through	372	1	**268**	203	1	148
	Through-Right		1			1	
	Right	164	0	164	92	0	92
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	31	1	**31**	178	1	**178**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	51	1	0	223	1	163
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	28	0	28	20	0	20
	Left-Through		0			0	
	Through	0	0	**68**	0	0	**38**
	Through-Right		0			0	
	Right	40	0	0	18	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	423		*North-South:*	801
			East-West:	99		*East-West:*	216
			SUM:	522		*SUM:*	1017
VOLUME/CAPACITY *(V/C)* RATIO:				0.348			0.678
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.248**			**0.578**
LEVEL OF SERVICE (LOS):				**A**			**A**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
896	North-South Street:	Argyle Ave	East-West Street:	East Site Driveway	
	Scenario:	Future(2027) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	155	1	155	121	1	121
	Left-Through		0			0	
	Through	534	0	**539**	1118	0	**1169**
	Through-Right		1			1	
	Right	5	0	0	51	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	6	1	**6**	22	1	**22**
	Left-Through		0			0	
	Through	539	1	352	351	1	222
	Through-Right		1			1	
	Right	164	0	164	92	0	92
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	31	1	**31**	178	1	**178**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	51	1	0	223	1	163
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	29	0	29	21	0	21
	Left-Through		0			0	
	Through	0	0	**70**	0	0	**40**
	Through-Right		0			0	
	Right	41	0	0	19	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	545		*North-South:*	1191
			East-West:	101		*East-West:*	218
			SUM:	646		*SUM:*	1409
VOLUME/CAPACITY *(V/C)* RATIO:				0.431			0.939
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.331**			**0.839**
LEVEL OF SERVICE (LOS):				**A**			**D**

Version: 1i Beta; 8/4/2011

Level of Service Worksheet
(Circular 212 Method)

I/S #:	PROJECT TITLE:	Hollywood Center			
896	North-South Street:	Argyle Ave	East-West Street:	East Site Driveway	
	Scenario:	Future(2040) + Project - Alternative 8			
	Count Date:	6/28/2018	Analyst:	Fehr & Peers	Date: 1/9/2018

		AM			PM		
No. of Phases				2			2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0			0
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB--	0	NB-- 0	SB--	0
		EB-- 0	WB--	0	EB-- 0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?				2			2
Override Capacity				0			0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	156	1	156	122	1	122
	Left-Through		0			0	
	Through	548	0	**553**	1156	0	**1209**
	Through-Right		1			1	
	Right	5	0	0	53	0	0
	Left-Through-Right		0			0	
	Left-Right		0			0	
SOUTHBOUND	Left	7	1	**7**	23	1	**23**
	Left-Through		0			0	
	Through	559	1	362	362	1	227
	Through-Right		1			1	
	Right	165	0	165	92	0	92
	Left-Through-Right		0			0	
	Left-Right		0			0	
EASTBOUND	Left	31	1	**31**	179	1	**179**
	Left-Through		0			0	
	Through	0	0	0	0	0	0
	Through-Right		0			0	
	Right	51	1	0	224	1	163
	Left-Through-Right		0			0	
	Left-Right		0			0	
WESTBOUND	Left	30	0	30	22	0	22
	Left-Through		0			0	
	Through	0	0	**74**	0	0	**42**
	Through-Right		0			0	
	Right	44	0	0	20	0	0
	Left-Through-Right		1			1	
	Left-Right		0			0	
CRITICAL VOLUMES			*North-South:*	560		*North-South:*	1232
			East-West:	105		*East-West:*	221
			SUM:	665		*SUM:*	1453
VOLUME/CAPACITY *(V/C)* RATIO:				0.443			0.969
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.343**			**0.869**
LEVEL OF SERVICE (LOS):				**A**			**D**

Version: 1i Beta; 8/4/2011

Attachment E - Freeway Facilities Memorandum

FEHR PEERS

TECHNICAL MEMORANDUM

To: Mike Harden and Jay Ziff, ESA

From: Tom Gaul, Miguel Nunez, and Johnny Schmidt

Date: August 2020

Subject: Freeway Facility Impact Analysis for the Hollywood Center Project Alternative 8

Ref: 2987

This technical memorandum summarizes the results of the supplemental analysis conducted of potential effects of Alternative 8: Office, Residential and Commercial Alternative (Alternative 8) considered in the proposed Hollywood Center Project (Project) Draft Environmental Impact Report (Draft EIR) on nearby State highway facilities. The California Department of Transportation (Caltrans) submitted two comment letters dated April 22, 2019 (in response to scoping meetings held on December 19, 2018 and February 26, 2019) and March 5, 2020, as part of preparation of the Draft EIR.

Alternative 8, which was included in the Draft EIR, is being considered as a project alternative for implementation. This supplemental analysis was prepared to present a more detailed analysis of the transportation effects of the alternative. The information provided in this supplemental analysis simply clarifies, amplifies, or refines the information and analysis provided in the Draft EIR, but does not make any changes that would meet the definition of "significant new information" as defined in CEQA Guidelines Section 15088.5. This supplemental analysis does not change or modify the Alternative 8 environmental analysis and conclusions in Section V. Alternatives, of the Draft EIR, but rather, provides additional details on the conclusions provided therein and provides additional details on the issue of freeway facilities being analyzed.

In the 2019 letter, Caltrans requested queuing analysis of the following freeway ramps close to the Project Site:

- Cahuenga Boulevard & US 101 NB off-ramp
- Cahuenga Boulevard & US 101 SB off-ramp
- Vine Street/Franklin Avenue & US 101 SB off-ramp
- Gower Street & US 101 NB off-ramp
- Gower Street & US 101 SB off-ramp
- US 101 NB off-ramp & Hollywood Blvd
- US 101 SB off-ramp & Hollywood Blvd

Additionally, Caltrans recommended that the following locations be included in the mainline merge and weaving analysis:

- US 101 Odin Street to Cahuenga Boulevard
- US 101 Cahuenga Boulevard to Vine Street
- US 101 Vine Street to Gower Street
- US 101 Gower Street to Hollywood Boulevard
- US 101 Hollywood Boulevard to Sunset Boulevard

A memorandum dated April 10, 2020, containing the analysis and findings on State highway facilities for the proposed Hollywood Center Project is included in Appendix I of the Transportation Assessment[1] (TA) prepared for and attached to the Hollywood Center Draft Environmental Impact Report (Draft EIR).

The previous memorandum and this supplemental document include an analysis of freeway segments near the Project Site where Alternative 8-related vehicle trips may access the freeway system. In addition, it also considers 'safety traffic concerns' raised in the Caltrans letter dated March 5, 2020. Per Public Resources Code §21159. and Senate Bill 375, projects that are consistent with the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) are exempt from California Environmental Quality Act (CEQA) impact analysis on the regional transportation network. Therefore, this analysis is provided for informational purposes.

As a result of the Caltrans letter, coordination discussions, and the screening analysis conducted as part of the MOU, the following analyses were conducted: off-ramp queuing analysis and mainline freeway (merge, diverge, and weave segments) analysis. The analyses were conducted in accordance with *Highway Capacity Manual*[2] (HCM) methodologies as specified in the Caltrans *Guide for the Preparation of Traffic Impact Studies*[3] (TIS Guide).

The study locations, methodologies, impact criteria, counts, related projects, and future background growth forecasts used in this memorandum for analysis of Alternative 8 are all identical to those developed for the prior analysis; therefore, detailed information pertaining to those parameters can be found in the Freeway Facilities Memorandum in Appendix I of the Transportation Assessment in Appendix N-1 of the Draft EIR. The differences between the proposed Project and Alternative 8 are based on the revised proposed land uses and quantities. Alternative 8 replaces the residential on the East Site with office and shifts all the affordable housing to the West Site. While there are changes in the proposed land uses, the site access scheme is unchanged for vehicles.

Tables and attachments are at the end of this memorandum.

ALTERNATIVE 8 TRIPS

Three new buildings are proposed as part of Alternative 8, including a 48-story market-rate residential building and a 13-story senior affordable housing building set aside for extremely-low and very-low income households, collectively referred to as the "West Site," and a 17-story office

[1] *Transportation Assessment Report for Hollywood Center*, Fehr & Peers, 2020.
[2] *Highway Capacity Manual*, Transportation Research Board, 2016 (6th Edition).
[3] *Guide for the Preparation of Traffic Impact Studies,* California Department of Transportation, December 2002.

building on the "East Site." Alternative 8 would include 903 residential dwelling units (770 market-rate units and 133 senior affordable housing units), approximately 27,140 square feet of commercial floor area (fast food and high-turnover sit down restaurant uses), approximately 386,347 square feet of office space, 2,237 vehicle parking spaces, and 526 bicycle parking spaces.

Alternative 8 is estimated to generate approximately 532 net new vehicle trips during the morning peak hour and 833 net new vehicle trips during the afternoon peak hour. The methodology used to estimate these trips is provided in the Transportation Assessment conducted by Fehr & Peers for the Project and in a Supplemental Analysis Memo prepared for Alternative 8.[4] The TA and Supplemental Analysis Memo also provide a detailed discussion of the development of the geographic distribution of trips generated by Alternative 8. A select zone analysis was conducted for the proposed uses using the City of Los Angeles' travel demand model to inform the general distribution pattern for this study.

Geometric, volume, and analysis outputs for this analysis can be found in **Attachment A** for Existing, Existing plus Project, Future (2027), Future (2027) plus Project, Future (2040), and Future (2040) plus Project scenarios. As stated previously, there is no change to the no project conditions and this analysis is updated by reassessing the potential for deficiencies with the addition of the estimated trip generation for Alternative 8.

MAINLINE FREEWAY ON/OFF-RAMP INFLUENCE AREA ANALYSIS

Mainline freeway analyses were conducted using the HCM operational analysis methodology to analyze segments of US 101 in the northbound and southbound directions, between Sunset Boulevard & Barham Boulevard, where Project trips would enter the freeway network. Within the freeway are segments classified as basic, weave, diverge, and merge.

The HCM freeway segment methodology was used to analyze the capacity and LOS of weave, diverge, and merge freeway segments. A freeway segment can be characterized by three performance measures: density in terms of passenger cars per mile per lane, speed in terms of mean passenger-car speed, and V/C ratio. Each of these measures is an indication of how well the freeway is accommodating traffic flow. The measure used to provide an estimate of LOS is density. Level of service was determined using the following definitions from the HCM as presented in Appendix C of the Caltrans TIS Guide:

[4] *Technical Memorandum, Supplemental Impact Analysis for the Hollywood Center Project Alternative 8*, Fehr & Peers, August 2020.

LOS DEFINITIONS FOR FREEWAY SEGMENTS

Level of Service	Maximum Density (pc/mi/ln)		Minimum Speed (mph)[5]
	Basic[6]	Merge, Diverge, and Weave[7]	
A	11	10	65.0
B	18	20	65.0
C	26	28	64.6
D	35	35	59.7
E	45	43	52.2
F	>45	>43	<52.2

Based on discussions with Caltrans, a Project-related effect is considered substantial if the traffic generated by the Project: (a) causes the freeway mainline segment level of service (LOS) to deteriorate to LOS F; or (b) when the segment is already at LOS F, causes an increase in the demand/capacity ratio of greater than or equal to 2%.

When using the Highway Capacity Manual (HCM) to analyze existing freeway operations, the result may show unrealistically good conditions when volumes are suppressed due to congestion. Therefore, the analysis result has been presented in light of the actual conditions from the field observations and available speed data; that is, if traffic is exhibiting congested conditions, the vehicle demand exceeds capacity, which is defined as LOS F. As a result, a bottleneck at a nearby location affecting upstream and downstream operating conditions has been reported by replacing the calculated LOS with LOS "F".

Freeway mainline volume and speed data was obtained from Caltrans' Performance Measurement System (PeMS) archived traffic data for the AM (7:00-9:00) and PM (16:00-18:00) peak periods for Tuesdays, Wednesdays, and Thursdays in May 2018. PeMs data was used only if it was 50% or better observed. Existing counts were used at ramp locations.

EXISTING AND EXISTING PLUS PROJECT

Existing and Existing plus Project conditions for the Alternative 8 on the mainline segments are presented in **Tables 1 and 2**.

No change in LOS is projected with the addition of Alternative 8 and the increase in V/C for Alternative 8 would be less than 2% at locations operating at LOS F; therefore Alternative 8 effects for Existing conditions would be less than substantial. Detailed LOS calculations are provided in **Attachment A**.

[5] *Guide for the Preparation of Traffic Impact Studies,* California Department of Transportation, December 2002. (Appendix C)
[6] *Highway Capacity Manual* 2010, Exhibit 11-5.
[7] *Highway Capacity Manual* 6th *Edition* 2016, Exhibit 11-5.

FUTURE YEAR (2027) AND FUTURE YEAR (2027) PLUS PROJECT

Cumulative future volumes were projected in the Transportation Assessment Report for the Future scenario (Year 2027) to include both an ambient growth rate as well as trips from known development projects within the study area. Based on the City of Los Angeles' travel demand forecasting model, it was established that an ambient growth factor of 0.4% per year should be applied to adjust the existing year traffic volumes to reflect the effects of regional growth and development by year 2027. In addition to the background growth rate, the Future Year (2027) traffic volume forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the proposed Project Site prior to the buildout date of the proposed Project. The list of related projects was prepared based on data from LADOT, the Los Angeles Department of City Planning (LADCP) major projects website, the City of West Hollywood, and additional research. A total of 150 related projects were identified in the study area.

Future Year (2027) and Future Year (2027) plus Project conditions for Alternative 8 on the mainline segments are presented in **Tables 3 and 4**. For Alternative 8, all of the analyzed segments are projected to continue to operate at the same LOS as under Future Year (2027) base conditions, except for the segment at Hollywood Boulevard to Gower Street on US-101 Northbound in the AM peak hour found in **Table 3**. Since the LOS for this segment does not deteriorate to LOS F, there is not a segment that meets the threshold for substantial effect based on analysis of Alternative 8.

Detailed LOS calculations are provided in **Attachment A**.

FUTURE YEAR (2040) AND FUTURE YEAR (2040) PLUS PROJECT

Cumulative future volumes for Year 2040 were also projected to include both an ambient growth rate as well as trips from known development projects within the study area. Future Year (2040) and Future Year (2040) plus Project conditions for Alternative 8 on the mainline segments are presented in **Tables 5 and 6**. For Alternative 8, all of the analyzed segments are projected to continue to operate at the same LOS as under Future Year (2040) base conditions, except for the segment at the Hollywood Boulevard off-ramp on US-101 Northbound in the AM peak hour found in **Table 5**. Since the LOS for this segment does not deteriorate to LOS F, there is not a segment that meets the threshold for substantial effect based on analysis of Alternative 8.

Detailed LOS calculations are provided in **Attachment A**.

OFF-RAMP QUEUEING ANALYSIS

In response to the request from Caltrans, freeway off-ramp queuing analysis was conducted at seven freeway off-ramp locations that serve the Project Site. Queue lengths were estimated using the Synchro traffic analysis software package. Intersection counts were collected at each of the ramp locations and signal timing charts were used to accurately analyze operations. The focus of the queuing analysis was to specifically determine if there is adequate storage capacity at the off-ramps.

Based on direction from Caltrans, an effect is considered substantial, and therefore considered by Caltrans to be a safety concern, if the addition of Project trips would result in a queue exceeding 85% of the ramp length. When an auxiliary lane is present, a queueing effect is considered substantial, and therefore considered by Caltrans to be a safety concern, if the addition of Project trips would result in a queue exceeding the length of the ramp plus the lesser of one-half length of the auxiliary lane or 1,000 feet. A substantial cumulative effect would occur if the Project would add to a queue that already exceeds the ramp storage area. Additional detail regarding how ramp storage lengths and thresholds are determined is provided below and in Tables 7 through 9.

The off-ramp queueing analysis involves the identification of the following:

A. Max ramp length: the ramp length is determined based on scaled distances form on-line aerial photographs. Per the Caltrans letter dated April 22, 2019, the max length is measured from the stop bar or crosswalk at the intersection to the gore point. When an auxiliary lane is present, the max length measurement includes the auxiliary lane to the gore point of the preceding on-ramp (as described above and below, the entire auxiliary lane is not included in the ramp length threshold application).
B. Ramp length threshold: the ramp length threshold is calculated as 85% of the max ramp length, unless an auxiliary lane is present. When an auxiliary lane is present, the ramp length threshold is calculated by summing the total length of the ramp from the intersection to the gore point and adding the lesser of 1,000 feet or one half the length of the auxiliary lane.
C. Ramp capacity threshold:
    a. When shared lane movements or multiple turn lanes for the same movement are present, the queuing evaluation compares the max sum of queues for each lane against the sum of the storage capacity for corresponding movements, as shown in the ramp capacity threshold column.
    b. When shared lane movements are not present, queues are compared to ramp capacity threshold for each respective turning movement.

The 95th percentile queues are presented for corresponding movements and then compared to the ramp capacity threshold for substantial effect. The ramp capacity threshold is based on measurements of the ramp locations and input from Caltrans. Geometric data and volume data for the ramp locations can be found in **Attachment A** for Existing, Existing plus Project, Future (2027), Future (2027) plus Project, Future (2040), and Future (2040) plus Project for Alternative 8.

EXISTING BASELINE AND EXISTING BASELINE PLUS PROJECT

Table 7 presents a summary of the ramp queuing analysis for the Existing and Existing plus Project conditions for Alternative 8. The 95th percentile queues were reported for the purposes of this analysis. The freeway ramp queue does not exceed the storage length at any of the off-ramps in both Existing and Existing plus Project scenarios. As a result, Alternative 8 is not considered to have a substantial effect at any of these locations and is therefore also not considered to have an effect on traffic safety.

Detailed queue calculations are provided in **Attachment A**.

FUTURE YEAR (2027) AND FUTURE YEAR (2027) PLUS PROJECT

Table 8 presents a summary of the ramp queuing analysis for the Future Year (2027) and Future Year (2027) plus Project for Alternative 8. The freeway ramp queues are not projected to exceed the storage length at any of the off-ramps during both Future Year (2027) and Future Year (2027) plus Project scenarios. As a result, Alternative 8 is not considered to have a substantial project or cumulative effect at any of these locations, and is therefore also not considered to have an effect on traffic safety.

Detailed queue calculations are provided in **Attachment A**.

FUTURE YEAR (2040) AND FUTURE YEAR (2040) PLUS PROJECT

Table 9 presents a summary of the ramp queuing analysis for the Future Year (2040) and Future Year (2040) plus Project for Alternative 8. The freeway ramp queues are not projected to exceed the storage length at any of the off-ramps during both Future Year (2040) and Future Year (2040) plus Project scenarios. As a result, Alternative 8 is not considered to have a substantial project or cumulative effect at any of these locations, and is therefore also not considered to have an effect on traffic safety.

Detailed queue calculations are provided in **Attachment A**.

CONCLUSION

The freeway mainline on/off-ramp influence area analysis indicates that the addition of Project-generated trips for Alternative 8 would not cause a substantial project or cumulative effect at any segment.

The queuing analysis shows that the freeway off-ramp queues would not extend beyond the length of the off-ramp capacity criteria at any of the locations requested for analysis by Caltrans as either a potential traffic conflict for State highway facilities or as a safety traffic concern. Thus Alternative 8 would not result in a substantial project or cumulative effect, and would not affect safety traffic concerns at the analyzed locations.

This freeway facility and traffic safety analysis to State highway facilities is provided as a supplement to the Transportation Assessment Report for inclusion in the Environmental Impact Report for informational purposes.

TABLE 1
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 NORTHBOUND (BETWEEN SUNSET BOULEVARD AND BARHAM BOULEVARD)

SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	EXISTING				EXISTING PLUS PROJECT				PROJECT IMPACT?
			VOLUME [a]	V/C	DENSITY	LOS [b]	VOLUME	V/C	DENSITY	LOS [b]	
Sunset Blvd Off	Diverge	AM	7,232	0.959	39.07	E	7,283	0.964	39.28	E	No
		PM	4,756	0.586	24.95	F	4,805	0.591	25.15	F	No
Hollywood Blvd Off	Diverge	AM	5,977	0.702	29.12	D	6,028	0.711	29.44	D	No
		PM	4,253	0.523	22.33	F	4,302	0.531	22.65	F	No
Hollywood Blvd Off to On	Basic	AM	5,589	0.660	24.71	C	5,619	0.663	24.85	C	No
		PM	3,810	0.450	16.85	F	3,837	0.453	16.96	F	No
Hollywood Blvd to Gower St	Weave	AM	5,589	0.684	30.36	D	5,619	0.688	30.63	D	No
		PM	3,810	0.488	19.92	F	3,837	0.492	20.12	F	No
Gower St Off to to Argyle Ave On	Basic	AM	6,263	0.739	27.96	D	6,269	0.740	27.99	D	No
		PM	4,485	0.529	19.83	F	4,486	0.529	19.83	F	No
Argyle Ave On	Merge	AM	6,263	0.858	34.11	D	6,269	0.860	34.25	D	No
		PM	4,485	0.689	25.86	F	4,486	0.693	26.03	F	No
Cahuenga Blvd Off	Diverge	AM	7,280	0.674	28.46	D	7,300	0.676	28.52	D	No
		PM	5,854	0.552	23.83	F	5,889	0.555	23.95	F	No
Cahuenga Blvd to Highland Ave	Basic	AM	6,974	0.658	24.67	C	6,994	0.660	24.74	C	No
		PM	5,768	0.545	20.40	F	5,803	0.548	20.53	F	No
Highland Ave Off	Diverge	AM	6,974	0.933	26.07	C	6,994	0.936	26.16	C	No
		PM	5,768	0.737	18.63	F	5,803	0.741	18.79	F	No
Highland Ave to Pilgrimage Bridge	Basic	AM	6,386	0.882	35.58	E	6,406	0.884	35.76	E	No
		PM	5,535	0.764	29.10	F	5,570	0.769	29.33	F	No
Pilgrimage Bridge to Barham Blvd	Weave	AM	6,386	0.814	35.34	E	6,406	0.821	35.62	E	No
		PM	5,535	0.752	31.98	F	5,570	0.771	32.57	F	No

Notes:

[a] Existing freeway volume data was obtained from PeMS.

[b] PM peak hour LOS based on field observations and PeMS speed data, congested conditions at these locations may result in lower traffic volumes, therefore to provide a conservative analysis these locations have assumed to operate at LOS F.

TABLE 2
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 SOUTHBOUND (BETWEEN CAHUENGA BOULEVARD AND HOLLYWOOD BOULEVARD)

			EXISTING				EXISTING PLUS PROJECT				PROJECT
SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	VOLUME [a]	V/C	DENSITY	LOS	VOLUME	V/C	DENSITY	LOS	IMPACT?
Cahuenga Blvd Off	Diverge	AM	8,175	1.064	-	F	8,228	1.073	-	F	No
		PM	7,462	0.946	38.77	E	7,512	0.954	39.096	E	No
Vine St Off	Diverge	AM	6,904	0.987	41.60	E	6,930	0.993	41.846	E	No
		PM	6,483	0.904	38.45	E	6,510	0.910	38.704	E	No
Vine St Off to Cahuenga Blvd On	Basic	AM	5,191	0.613	22.95	C	5,191	0.613	22.955	C	No
		PM	5,040	0.595	22.28	C	5,040	0.595	22.284	C	No
Cahuenga Blvd to Gower St	Weave	AM	5,191	0.559	22.92	C	5,191	0.559	22.916	C	No
		PM	5,040	0.542	22.00	C	5,040	0.542	21.997	C	No
Gower St Off to Argyle Ave On	Basic	AM	4,754	0.561	21.02	C	4,754	0.561	21.022	C	No
		PM	4,672	0.551	20.66	C	4,672	0.551	20.657	C	No
Argyle Ave to Hollywood Blvd	Weave	AM	4,754	0.516	21.21	C	4,754	0.518	21.318	C	No
		PM	4,672	0.513	21.11	C	4,672	0.518	21.377	C	No
Van Ness Ave Off	Diverge	AM	4,350	0.580	21.65	C	4,364	0.582	21.705	C	No
		PM	4,276	0.565	21.07	C	4,310	0.568	21.207	C	No
Van Ness Ave Off to Hollywood Blvd On	Basic	AM	3,572	0.422	15.80	B	3,586	0.423	15.858	B	No
		PM	3,550	0.419	15.70	B	3,584	0.423	15.846	B	No
Hollywood Blvd On	Merge	AM	3,572	0.388	17.50	B	3,586	0.393	17.643	B	No
		PM	3,550	0.392	17.62	B	3,584	0.402	17.976	B	No

Notes:
[a] Existing freeway volume data was obtained from PeMS.

TABLE 3
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 NORTHBOUND (BETWEEN SUNSET BOULEVARD AND BARHAM BOULEVARD)

SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	CUMULATIVE BASE (2027)				CUMULATIVE PLUS PROJECT (2027)				PROJECT IMPACT?
			VOLUME [a]	V/C	DENSITY	LOS [b]	VOLUME	V/C	DENSITY	LOS [b]	
Sunset Blvd Off	Diverge	AM	8,637	1.202	-	F	8,688	1.207	-	F	No
		PM	6,234	0.859	35.28	F	6,283	0.864	35.49	F	No
Hollywood Blvd Off	Diverge	AM	6,732	0.820	33.57	D	6,783	0.828	33.89	D	No
		PM	4,920	0.643	26.86	F	4,969	0.651	27.17	F	No
Hollywood Blvd Off to On	Basic	AM	6,087	0.718	27.06	D	6,117	0.722	27.21	D	No
		PM	4,137	0.488	18.29	F	4,164	0.491	18.41	F	No
Hollywood Blvd to Gower St	Weave	AM	6,087	0.756	34.99	D	6,117	0.760	35.29	E	No
		PM	4,137	0.547	23.08	F	4,164	0.551	23.30	F	No
Gower St Off to to Argyle Ave On	Basic	AM	6,832	0.806	31.20	D	6,838	0.807	31.23	D	No
		PM	4,893	0.577	21.63	F	4,894	0.578	21.64	F	No
Argyle Ave On	Merge	AM	6,832	0.973	42.50	E	6,838	0.975	42.71	E	No
		PM	4,893	0.803	31.03	F	4,894	0.807	-	F	No
Cahuenga Blvd Off	Diverge	AM	8,259	0.763	31.84	D	8,279	0.765	31.91	D	No
		PM	6,823	0.611	26.08	F	6,858	0.614	26.19	F	No
Cahuenga Blvd to Highland Ave	Basic	AM	7,920	0.748	28.35	D	7,940	0.750	28.43	D	No
		PM	6,686	0.631	23.65	F	6,721	0.635	23.77	F	No
Highland Ave Off	Diverge	AM	7,920	1.052	-	F	7,940	1.054	-	F	No
		PM	6,686	0.850	22.92	F	6,721	0.854	23.08	F	No
Highland Ave to Pilgrimage Bridge	Basic	AM	7,311	1.009	-	F	7,331	1.012	-	F	No
		PM	6,445	0.890	36.11	F	6,480	0.894	36.43	F	No
Pilgrimage Bridge to Barham Blvd	Weave	AM	7,311	1.041	-	F	7,331	1.049	-	F	No
		PM	6,445	1.016	-	F	6,480	1.035	-	F	No

Notes:

[a] Existing freeway volume data was obtained from PeMS.

[b] PM peak hour LOS based on field observations and PeMS speed data, congested conditions at these locations may result in lower traffic volumes, therefore to provide a conservative analysis these locations have assumed to operate at LOS F.

TABLE 4
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 SOUTHBOUND (BETWEEN CAHUENGA BOULEVARD AND HOLLYWOOD BOULEVARD)

SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	CUMULATIVE BASE (2027)				CUMULATIVE PLUS PROJECT (2027)				PROJECT IMPACT?
			VOLUME [a]	V/C	DENSITY	LOS	VOLUME	V/C	DENSITY	LOS	
Cahuenga Blvd Off	Diverge	AM	9,380	1.226	-	F	9,433	1.236	-	F	No
		PM	8,948	1.142	-	F	8,998	1.151	-	F	No
Vine St Off	Diverge	AM	7,878	1.136	-	F	7,904	1.142	-	F	No
		PM	7,712	1.077	-	F	7,739	1.084	-	F	No
Vine St Off to Cahuenga Blvd On	Basic	AM	5,854	0.691	25.93	C	5,854	0.691	25.926	C	No
		PM	5,980	0.706	26.53	D	5,980	0.706	26.530	D	No
Cahuenga Blvd to Gower St	Weave	AM	5,854	0.638	27.19	C	5,854	0.638	27.194	C	No
		PM	5,980	0.648	27.69	C	5,980	0.648	27.694	C	No
Gower St Off to Argyle Ave On	Basic	AM	5,330	0.629	23.57	C	5,330	0.629	23.567	C	No
		PM	5,422	0.640	23.97	C	5,422	0.640	23.974	C	No
Argyle Ave to Hollywood Blvd	Weave	AM	5,330	0.585	24.74	C	5,330	0.587	24.857	C	No
		PM	5,422	0.601	25.74	C	5,422	0.606	26.036	C	No
Van Ness Ave Off	Diverge	AM	4,934	0.669	25.03	C	4,948	0.671	25.089	C	No
		PM	5,018	0.671	25.10	C	5,052	0.675	25.242	C	No
Van Ness Ave Off to Hollywood Blvd On	Basic	AM	3,968	0.468	17.54	B	3,982	0.470	17.607	B	No
		PM	4,104	0.484	18.15	C	4,138	0.488	18.297	C	No
Hollywood Blvd On	Merge	AM	3,968	0.489	20.96	C	3,982	0.493	21.103	C	No
		PM	4,104	0.519	22.01	C	4,138	0.529	22.360	C	No

Notes:
[a] Existing freeway volume data was obtained from PeMS.

TABLE 5
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 NORTHBOUND (BETWEEN SUNSET BOULEVARD AND BARHAM BOULEVARD)

SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	CUMULATIVE BASE (2040)				CUMULATIVE PLUS PROJECT (2040)				PROJECT IMPACT?
			VOLUME [a]	V/C	DENSITY	LOS [b]	VOLUME	V/C	DENSITY	LOS [b]	
Sunset Blvd Off	Diverge	AM	9,013	1.251	-	F	9,064	1.257	-	F	No
		PM	6,481	0.889	36.44	F	6,530	0.895	36.64	F	No
Hollywood Blvd Off	Diverge	AM	7,043	0.857	34.96	D	7,094	0.865	35.28	E	No
		PM	5,141	0.670	27.88	F	5,190	0.678	28.20	F	No
Hollywood Blvd Off to On	Basic	AM	6,376	0.752	28.56	D	6,406	0.756	28.72	D	No
		PM	4,336	0.512	19.17	F	4,363	0.515	19.29	F	No
Hollywood Blvd to Gower St	Weave	AM	6,376	0.792	37.29	E	6,406	0.796	37.60	E	No
		PM	4,336	0.572	24.46	F	4,363	0.576	24.68	F	No
Gower St Off to to Argyle Ave On	Basic	AM	7,158	0.845	33.32	D	7,164	0.845	33.36	D	No
		PM	5,125	0.605	22.66	F	5,126	0.605	22.67	F	No
Argyle Ave On	Merge	AM	7,158	1.018	-	F	7,164	1.020	-	F	No
		PM	5,125	0.839	-	F	5,126	0.843	-	F	No
Cahuenga Blvd Off	Diverge	AM	8,639	0.799	33.17	D	8,659	0.800	33.24	D	No
		PM	7,126	0.638	27.09	F	7,161	0.641	27.21	F	No
Cahuenga Blvd to Highland Ave	Basic	AM	8,284	0.782	29.97	D	8,304	0.784	30.06	D	No
		PM	6,985	0.659	24.71	F	7,020	0.663	24.83	F	No
Highland Ave Off	Diverge	AM	8,284	1.101	-	F	8,304	1.103	-	F	No
		PM	6,985	0.888	24.37	F	7,020	0.893	24.53	F	No
Highland Ave to Pilgrimage Bridge	Basic	AM	7,644	1.055	-	F	7,664	1.058	-	F	No
		PM	6,731	0.929	38.91	F	6,766	0.934	39.28	F	No
Pilgrimage Bridge to Barham Blvd	Weave	AM	7,644	1.083	-	F	7,664	1.091	-	F	No
		PM	6,731	1.055	-	F	6,766	1.074	-	F	No

Notes:

[a] Existing freeway volume data was obtained from PeMS.

[b] PM peak hour LOS based on field observations and PeMS speed data, congested conditions at these locations may result in lower traffic volumes, therefore to provide a conservative analysis these locations have assumed to operate at LOS F.

TABLE 6
HOLLYWOOD CENTER - ALTERNATIVE 8
US-101 SOUTHBOUND (BETWEEN CAHUENGA BOULEVARD AND HOLLYWOOD BOULEVARD)

SEGMENT NAME	SEGMENT TYPE	PEAK HOUR	CUMULATIVE BASE (2040)				CUMULATIVE PLUS PROJECT (2040)				PROJECT IMPACT?
			VOLUME [a]	V/C	DENSITY	LOS	VOLUME	V/C	DENSITY	LOS	
Cahuenga Blvd Off	Diverge	AM	9,805	1.282	-	F	9,858	1.291	-	F	No
		PM	9,336	1.191	-	F	9,386	1.200	-	F	No
Vine St Off	Diverge	AM	8,237	1.187	-	F	8,263	1.194	-	F	No
		PM	8,050	1.124	-	F	8,077	1.131	-	F	No
Vine St Off to Cahuenga Blvd On	Basic	AM	6,124	0.723	27.24	D	6,124	0.723	27.245	D	No
		PM	6,243	0.737	27.86	D	6,243	0.737	27.855	D	No
Cahuenga Blvd to Gower St	Weave	AM	6,124	0.667	28.78	D	6,124	0.667	28.778	D	No
		PM	6,243	0.676	29.23	D	6,243	0.676	29.227	D	No
Gower St Off to Argyle Ave On	Basic	AM	5,576	0.658	24.65	C	5,576	0.658	24.655	C	No
		PM	5,666	0.669	25.06	C	5,666	0.669	25.057	C	No
Argyle Ave to Hollywood Blvd	Weave	AM	5,576	0.611	26.16	C	5,576	0.613	26.285	C	No
		PM	5,666	0.628	27.21	C	5,666	0.633	27.514	C	No
Van Ness Ave Off	Diverge	AM	5,160	0.700	26.17	C	5,174	0.701	26.227	C	No
		PM	5,240	0.701	26.21	C	5,274	0.704	26.353	C	No
Van Ness Ave Off to Hollywood Blvd On	Basic	AM	4,154	0.490	18.37	C	4,168	0.492	18.429	C	No
		PM	4,288	0.506	18.96	C	4,322	0.510	19.110	C	No
Hollywood Blvd On	Merge	AM	4,154	0.509	21.68	C	4,168	0.513	21.826	C	No
		PM	4,288	0.539	22.73	C	4,322	0.549	23.084	C	No

Notes:
[a] Existing freeway volume data was obtained from PeMS.

TABLE 7
PEAK HOUR OFF-RAMP INTERSECTION QUEUE ANALYSIS
EXISTING PLUS PROJECT ALTERNATIVE 8

ID	Ramp	Cross Street	Max Ramp Length (ft) [a]	Ramp Length Threshold (ft) [b]	Ramp Capacity Threshold by Movement at Off-Ramp Terminus Intersection			Ramp Capacity Threshold [c,d]	Ramp Control at Terminus Intersection	Existing Conditions						Existing Plus Project							
										AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Exceeds Storage?		AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Length Increase	Queue Exceeds Storage?	Queue Length Increase	Queue Exceeds Storage?
					Lanes	Movement	Length (ft)			Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM		PM	
2 [e]	US-101 NB Off-Ramp	N Cahuenga Boulevard	1,132	916	2	Left/Right [c] Left [c]	916 270	1,186	Signal	101 101	202	35 35	70	No	No	101 101	202	35 35	70	0	No	0	No
3 [e]	US-101 SB Off-Ramp	N Cahuenga Boulevard	1,240	1,070	3	Left [d] Right [c] Right [c]	400 1,070 285	400 1,355	TWSC EW	14 303 303	606	9 93 93	186	No	No	15 323 323	646	9 99 99	198	40	No	12	No
8 [e]	US-101 SB Off-Ramp	Vine Street/ Franklin Avenue	2,850	2,125	2	Through [d] Right [d]	950 2,125	950 2,125	Signal	98 #358	98 358	183 0	756	No	No	107 #366	366	191 0	777	268	No	21	No
22 [e]	US-101 NB Off-Ramp	N Gower Street	1,590	1,125	2	Right [d] Left [d]	420 1,125	420 1,125	TWSC EW	120 7	120	38 13	38	No	No	143 7	143	68 13	68	23	No	30	No
23 [e]	US-101 SB Off-Ramp	N Gower Street	1,520	1,260	2	Left/Through [c] Right/Through [c]	285 1,260	1,545	TWSC EW	241 120	361	206 57	263	No	No	255 124	379	233 61	294	18	No	31	No
37 [e]	US-101 SB Off-Ramp	Hollywood Boulevard	1,650	1,235	2	Left [c] Left/Through/Right [c]	160 1,235	1,395	Signal	#310 #263	573	#323 #312	635	No	No	#310 #263	573	#323 #312	635	0	No	0	No
38	US-101 NB Off-Ramp	Hollywood Boulevard	978	831	3	Left [c] Left [c] Right [d]	831 520 390	1,351 390	Signal	157 160 21	317	185 183 21	368	No	No	167 168 21	335	192 196 21	388	18	No	20	No

Notes:

[a] Ramp length determined based on scaled distances from on-line aerial photographs. Per Caltrans letter dated April 22, 2019, max length is measured from the intersection to the gore point. When an auxiliary lane is present, the max length includes the auxiliary lane to the gore point of the preceding on-ramp. See footnote e.

[b] Per Caltrans letter dated April 22, 2019, ramp length threshold is 85% of max length, unless an auxiliary lane is present. When an auxiliary lane is present, the ramp length threshold is calculated by summing the total length of the ramp from the intersection to the gore point and the lesser of 1,000 feet or one half the length of the auxiliary lane.

[c] When shared lane movements or multiple turn lanes for the same movement are present, the queuing evaluation compares the max sum of queues for each lane against the sum of the storage capacity for corresponding movements shown in the ramp capacity threshold column.

[d] When shared lane movements are not present, queues are compared to ramp capacity threshold column for each respective turning movement.

[e] Auxiliary lane is present at these off-ramp locations and reflected in the max length and ramp length threshold columns.

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after 2 cycles.

TABLE 8
PEAK HOUR OFF-RAMP INTERSECTION QUEUE ANALYSIS
FUTURE (2027) PLUS PROJECT ALTERNATIVE 8

ID	Ramp	Cross Street	Max Ramp Length (ft) [a]	Ramp Length Threshold (ft) [b]	Ramp Capacity Threshold by Movement at Off-Ramp Terminus Intersection			Ramp Capacity Threshold [c,d]	Ramp Control at Terminus Intersection	Future (2027) Base Conditions						Future (2027) Plus Project							
										AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Exceeds Storage?		AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Length Increase	Queue Exceeds Storage?	Queue Length Increase	Queue Exceeds Storage?
					Lanes	Movement	Length (ft)			Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM		PM	
2 [e]	US-101 NB Off-Ramp	N Cahuenga Boulevard	1,132	916	2	Left/Right [c] Left [c]	916 270	1,186	Signal	112 112	224	52 52	104	No	No	112 112	224	52 52	104	0	No	0	No
3 [e]	US-101 SB Off-Ramp	N Cahuenga Boulevard	1,240	1,070	3	Left [d] Right [c] Right [c]	400 1,070 285	400 1,355	TWSC EW	27 479 479	958	21 208 208	416	No	No	28 507 507	1,014	22 223 223	446	56	No	30	No
8 [e]	US-101 SB Off-Ramp	Vine Street/ Franklin Avenue	2,850	2,125	2	Through [d] Right [d]	950 2,125	950 2,125	Signal	136 #712	712	214 #45	214	No	No	145 #720	720	222 #66	222	8	No	8	No
22 [e]	US-101 NB Off-Ramp	N Gower Street	1,590	1,125	2	Right [d] Left [d]	420 1,125	420 1,125	TWSC EW	338 8	338	233 15	233	No	No	385 8	385	310 15	310	47	No	77	No
23 [e]	US-101 SB Off-Ramp	N Gower Street	1,520	1,260	2	Left/Through [c] Right/Through [c]	285 1,260	1,545	TWSC EW	379 343	722	363 225	588	No	No	394 358	752	393 246	639	30	No	51	No
37 [e]	US-101 SB Off-Ramp	Hollywood Boulevard	1,650	1,235	2	Left [c] Left/Through/Right [c]	160 1,235	1,395	Signal	#356 #328	684	#394 #377	771	No	No	#356 #331	687	#394 #377	771	3	No	0	No
38	US-101 NB Off-Ramp	Hollywood Boulevard	978	831	3	Left [c] Left [c] Right [d]	831 520 390	1,351 390	Signal	#311 #309 38	620	#414 #415 38	829	No	No	#329 #325 38	637	#433 #431 38	864	17	No	35	No

Notes:

[a] Ramp length determined based on scaled distances from on-line aerial photographs. Per Caltrans letter dated April 22, 2019, max length is measured from the intersection to the gore point. When an auxiliary lane is present, the max length includes the auxiliary lane to the gore point of the preceding on-ramp. See footnote e.

[b] Per Caltrans letter dated April 22, 2019, ramp length threshold is 85% of max length, unless an auxiliary lane is present. When an auxiliary lane is present, the ramp length threshold is calculated by summing the total length of the ramp from the intersection to the gore point and the lesser of 1,000 feet or one half the length of the auxiliary lane.

[c] When shared lane movements or multiple turn lanes for the same movement are present, the queuing evaluation compares the max sum of queues for each lane against the sum of the storage capacity for corresponding movements shown in the ramp capacity threshold column.

[d] When shared lane movements are not present, queues are compared to ramp capacity threshold column for each respective turning movement.

[e] Auxiliary lane is present at these off-ramp locations and reflected in the max length and ramp length threshold columns.

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after 2 cycles.

TABLE 9
PEAK HOUR OFF-RAMP INTERSECTION QUEUE ANALYSIS
FUTURE (2040) PLUS PROJECT ALTERNATIVE 8

ID	Ramp	Cross Street	Max Ramp Length (ft) [a]	Ramp Length Threshold (ft) [b]	Ramp Capacity Threshold by Movement at Off-Ramp Terminus Intersection			Ramp Capacity Threshold [c,d]	Ramp Control at Terminus Intersection	Future (2040) Base Conditions						Future (2040) Plus Project							
										AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Exceeds Storage?		AM 95th Percentile Queue		PM 95th Percentile Queue		Queue Length Increase	Queue Exceeds Storage?	Queue Length Increase	Queue Exceeds Storage?
					Lanes	Movement	Length (ft)			Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM	PM	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM		PM	
2 [e]	US-101 NB Off-Ramp	N Cahuenga Boulevard	1,132	916	2	Left/Right [c] Left [c]	916 270	1,186	Signal	119 119	238	53 53	106	No	No	119 119	238	53 53	106	0	No	0	No
3 [e]	US-101 SB Off-Ramp	N Cahuenga Boulevard	1,240	1,070	3	Left [d] Right [c] Right [c]	400 1,070 285	400 1,355	TWSC EW	32 542 542	1,084	23 241 241	482	No	No	33 573 573	1,146	25 258 258	516	62	No	34	No
8 [e]	US-101 SB Off-Ramp	Vine Street/ Franklin Avenue	2,850	2,125	2	Through [d] Right [d]	950 2,125	950 2,125	Signal	141 #831	831	227 #129	227	No	No	151 #839	839	235 #153	235	8	No	8	No
22 [e]	US-101 NB Off-Ramp	N Gower Street	1,590	1,125	2	Right [d] Left [d]	420 1,125	420 1,125	TWSC EW	396 6	396	263 17	263	No	No	442 9	442	344 17	344	46	No	81	No
23 [e]	US-101 SB Off-Ramp	N Gower Street	1,520	1,260	2	Left/Through [c] Right/Through [c]	285 1,260	1,545	TWSC EW	443 411	854	424 258	682	No	No	457 427	884	454 282	736	30	No	54	No
37 [e]	US-101 SB Off-Ramp	Hollywood Boulevard	1,650	1,235	2	Left [c] Left/Through/Right [c]	160 1,235	1,395	Signal	#382 #356	738	#421 #401	822	No	No	#382 #358	740	#421 #401	822	2	No	0	No
38	US-101 NB Off-Ramp	Hollywood Boulevard	978	831	3	Left [c] Left [c] Right [d]	831 520 390	1,351 390	Signal	#326 #322 38	648	#428 #431 39	859	No	No	#343 #343 38	664	#447 #447 39	894	16	No	35	No

Notes:

[a] Ramp length determined based on scaled distances from on-line aerial photographs. Per Caltrans letter dated April 22, 2019, max length is measured from the intersection to the gore point. When an auxiliary lane is present, the max length includes the auxiliary lane to the gore point of the preceding on-ramp. See footnote e.

[b] Per Caltrans letter dated April 22, 2019, ramp length threshold is 85% of max length, unless an auxiliary lane is present. When an auxiliary lane is present, the ramp length threshold is calculated by summing the total length of the ramp from the intersection to the gore point and the lesser of 1,000 feet or one half the length of the auxiliary lane.

[c] When shared lane movements or multiple turn lanes for the same movement are present, the queuing evaluation compares the max sum of queues for each lane against the sum of the storage capacity for corresponding movements shown in the ramp capacity threshold column.

[d] When shared lane movements are not present, queues are compared to ramp capacity threshold column for each respective turning movement.

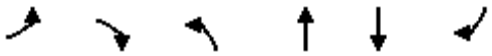
[e] Auxiliary lane is present at these off-ramp locations and reflected in the max length and ramp length threshold columns.

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after 2 cycles.

Caltrans Attachment A - LOS Worksheets and Freeway Analysis

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	333	1109	515
v/c Ratio	0.53	0.45	0.21
Control Delay	33.4	7.8	6.0
Queue Delay	0.0	0.0	0.0
Total Delay	33.4	7.8	6.0
Queue Length 50th (ft)	87	109	40
Queue Length 95th (ft)	101	264	106
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1410	2478	2478
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.24	0.45	0.21

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	1276	0	1007	747	0
Future Volume (Veh/h)	22	1276	0	1007	747	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	1387	0	1095	812	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked	0.99	0.99	0.99			
vC, conflicting volume	1360	271	812			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1340	245	789			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	83	0	100			
cM capacity (veh/h)	143	751	821			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	24	694	694	548	548	271	271	271
Volume Left	24	0	0	0	0	0	0	0
Volume Right	0	694	694	0	0	0	0	0
cSH	143	751	751	1700	1700	1700	1700	1700
Volume to Capacity	0.17	0.92	0.92	0.32	0.32	0.16	0.16	0.16
Queue Length 95th (ft)	15	323	323	0	0	0	0	0
Control Delay (s)	35.2	40.4	40.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	E	E					
Approach Delay (s)	40.3			0.0		0.0		
Approach LOS	E							

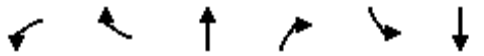
Intersection Summary			
Average Delay	17.1		
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	257	1634	1	914	474	367	43
v/c Ratio	0.22	1.05	no cap	0.40	0.46	0.17	0.09
Control Delay	9.2	40.9		0.7	13.8	8.5	30.3
Queue Delay	0.0	0.0		0.2	0.0	0.0	0.0
Total Delay	9.2	40.9	Error	1.0	13.8	8.5	30.3
Queue Length 50th (ft)	69	~104	0	0	51	48	22
Queue Length 95th (ft)	107	#366	0	6	98	69	50
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	2266	1031	2144	480
Starvation Cap Reductn	0	0	0	600	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	1.05	1.00	0.55	0.46	0.17	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

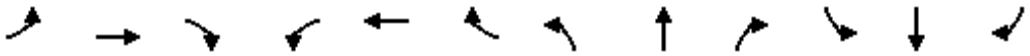
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	198	55	595	0	0	446
Future Volume (Veh/h)	198	55	595	0	0	446
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	215	60	647	0	0	485
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	890	324			647	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	890	324			647	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	24	91			100	
cM capacity (veh/h)	283	672			934	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	215	60	324	324	242	242
Volume Left	215	0	0	0	0	0
Volume Right	0	60	0	0	0	0
cSH	283	672	1700	1700	1700	1700
Volume to Capacity	0.76	0.09	0.19	0.19	0.14	0.14
Queue Length 95th (ft)	143	7	0	0	0	0
Control Delay (s)	49.2	10.9	0.0	0.0	0.0	0.0
Lane LOS	E	B				
Approach Delay (s)	40.8		0.0		0.0	
Approach LOS	E					

Intersection Summary			
Average Delay	8.0		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	25	358	0	0	0	0	387	17	20	626	0
Future Volume (Veh/h)	199	25	358	0	0	0	0	387	17	20	626	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	216	27	389	0	0	0	0	421	18	22	680	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	934	1163	340	1216	1154	220	680			439		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	934	1163	340	1216	1154	220	680			439		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	86	41	100	100	100	100			98		
cM capacity (veh/h)	217	190	656	49	192	785	908			1117		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	230	402	281	158	249	453
Volume Left	216	0	0	0	22	0
Volume Right	0	389	0	18	0	0
cSH	215	606	1700	1700	1117	1700
Volume to Capacity	1.07	0.66	0.17	0.09	0.02	0.27
Queue Length 95th (ft)	255	124	0	0	2	0
Control Delay (s)	127.5	21.9	0.0	0.0	0.9	0.0
Lane LOS	F	C			A	
Approach Delay (s)	60.2		0.0		0.3	
Approach LOS	F					

Intersection Summary				
Average Delay	21.6			
Intersection Capacity Utilization	56.5%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	534	195	40	1237	331	320
v/c Ratio	0.30	0.23	0.14	0.56	0.76	0.72
Control Delay	15.5	3.3	42.9	5.2	43.4	37.8
Queue Delay	0.0	0.0	0.0	1.2	57.4	57.6
Total Delay	15.5	3.3	42.9	6.4	100.7	95.4
Queue Length 50th (ft)	106	0	22	74	182	156
Queue Length 95th (ft)	147	39	m39	m99	#310	#263
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1780	852	295	2228	442	449
Starvation Cap Reductn	0	0	0	711	0	0
Spillback Cap Reductn	0	0	0	0	166	164
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.23	0.14	0.82	1.20	1.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	113	963	749	718	187	189	68	375
v/c Ratio	0.53	0.76	0.32	0.57	0.53	0.53	0.17	2.45
Control Delay	51.5	32.8	2.9	9.1	37.1	37.1	4.7	0.0
Queue Delay	0.0	49.7	1.1	7.8	0.0	0.0	0.0	0.0
Total Delay	51.5	82.5	4.0	17.0	37.1	37.1	4.7	0.0
Queue Length 50th (ft)	50	269	22	140	97	98	0	0
Queue Length 95th (ft)	101	#338	43	200	167	168	21	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	215	1263	2362	1249	381	383	423	153
Starvation Cap Reductn	0	399	1301	485	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	1.11	0.71	0.94	0.49	0.49	0.16	2.45

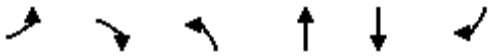
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	93	2099	273
v/c Ratio	0.19	0.77	0.10
Control Delay	31.0	12.5	4.7
Queue Delay	0.0	0.0	0.0
Total Delay	31.0	12.5	4.7
Queue Length 50th (ft)	24	277	15
Queue Length 95th (ft)	35	#848	57
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1319	2730	2730
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.07	0.77	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	986	0	1761	325	0
Future Volume (Veh/h)	16	986	0	1761	325	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	1072	0	1914	353	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked						
vC, conflicting volume	1310	118	353			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1310	118	353			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	0	100			
cM capacity (veh/h)	151	912	1202			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	17	536	536	957	957	118	118	118
Volume Left	17	0	0	0	0	0	0	0
Volume Right	0	536	536	0	0	0	0	0
cSH	151	912	912	1700	1700	1700	1700	1700
Volume to Capacity	0.11	0.59	0.59	0.56	0.56	0.07	0.07	0.07
Queue Length 95th (ft)	9	99	99	0	0	0	0	0
Control Delay (s)	31.9	14.4	14.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	D	B	B					
Approach Delay (s)	14.7			0.0		0.0		
Approach LOS	B							

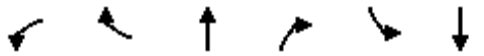
Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	433	1165	1	547	979	493	62
v/c Ratio	0.37	0.75	no cap	0.28	1.02	0.23	0.13
Control Delay	10.8	3.3		6.6	68.3	9.0	30.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	10.8	3.3	Error	6.6	68.3	9.0	30.9
Queue Length 50th (ft)	131	0	0	54	~326	69	32
Queue Length 95th (ft)	191	0	0	80	#456	93	66
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	1938	957	2144	480
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.75	1.00	0.28	1.02	0.23	0.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

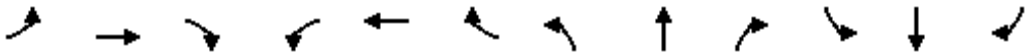
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	79	65	1004	0	0	338
Future Volume (Veh/h)	79	65	1004	0	0	338
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	86	71	1091	0	0	367
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1274	546			1091	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1274	546			1091	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	46	85			100	
cM capacity (veh/h)	159	482			635	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	86	71	546	546	184	184
Volume Left	86	0	0	0	0	0
Volume Right	0	71	0	0	0	0
cSH	159	482	1700	1700	1700	1700
Volume to Capacity	0.54	0.15	0.32	0.32	0.11	0.11
Queue Length 95th (ft)	68	13	0	0	0	0
Control Delay (s)	51.6	13.8	0.0	0.0	0.0	0.0
Lane LOS	F	B				
Approach Delay (s)	34.5		0.0		0.0	
Approach LOS	D					

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	16	292	0	0	0	0	787	11	6	403	0
Future Volume (Veh/h)	208	16	292	0	0	0	0	787	11	6	403	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	226	17	317	0	0	0	0	855	12	7	438	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	880	1319	219	1420	1313	434	438			867		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	880	1319	219	1420	1313	434	438			867		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	6	89	60	100	100	100	100			99		
cM capacity (veh/h)	240	154	785	52	156	570	1118			772		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	234	326	570	297	153	292
Volume Left	226	0	0	0	7	0
Volume Right	0	317	0	12	0	0
cSH	235	709	1700	1700	772	1700
Volume to Capacity	1.00	0.46	0.34	0.17	0.01	0.17
Queue Length 95th (ft)	233	61	0	0	1	0
Control Delay (s)	102.4	14.3	0.0	0.0	0.5	0.0
Lane LOS	F	B			A	
Approach Delay (s)	51.2		0.0		0.2	
Approach LOS	F					

Intersection Summary				
Average Delay	15.4			
Intersection Capacity Utilization	44.7%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	915	254	27	1065	339	336
v/c Ratio	0.47	0.27	0.09	0.48	0.78	0.77
Control Delay	15.6	3.1	45.4	4.0	44.7	42.9
Queue Delay	0.2	0.0	0.0	0.6	59.0	59.0
Total Delay	15.7	3.1	45.4	4.7	103.7	102.0
Queue Length 50th (ft)	124	0	15	37	187	178
Queue Length 95th (ft)	274	44	m33	m83	#323	#312
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1929	935	295	2228	442	443
Starvation Cap Reductn	0	0	0	723	0	0
Spillback Cap Reductn	276	0	0	0	205	203
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.27	0.09	0.71	1.43	1.40

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	163	1351	612	711	217	221	67	154
v/c Ratio	0.60	1.04	0.26	0.57	0.58	0.59	0.16	1.01
Control Delay	44.5	63.6	2.1	12.2	38.3	38.5	4.4	0.0
Queue Delay	0.0	26.1	1.3	52.3	0.0	0.0	0.0	12.2
Total Delay	44.5	89.7	3.4	64.4	38.3	38.5	4.4	12.2
Queue Length 50th (ft)	37	~491	12	205	115	117	0	0
Queue Length 95th (ft)	#157	#615	25	236	192	196	21	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	273	1305	2283	1228	381	384	423	153
Starvation Cap Reductn	0	238	1400	585	0	0	0	0
Spillback Cap Reductn	0	51	0	0	0	0	3	6
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	1.27	0.69	1.11	0.57	0.58	0.16	1.05

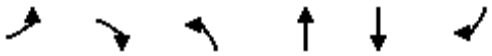
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	368	1528	678
v/c Ratio	0.56	0.62	0.28
Control Delay	34.2	10.4	6.7
Queue Delay	0.0	0.0	0.0
Total Delay	34.2	10.4	6.7
Queue Length 50th (ft)	98	193	60
Queue Length 95th (ft)	112	435	142
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1407	2447	2447
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.26	0.62	0.28

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	1506	0	1393	929	0
Future Volume (Veh/h)	23	1506	0	1393	929	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	1637	0	1514	1010	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked	0.97	0.97	0.97			
vC, conflicting volume	1767	337	1010			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1680	205	899			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	70	0	100			
cM capacity (veh/h)	83	777	728			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	25	818	818	757	757	337	337	337
Volume Left	25	0	0	0	0	0	0	0
Volume Right	0	818	818	0	0	0	0	0
cSH	83	777	777	1700	1700	1700	1700	1700
Volume to Capacity	0.30	1.05	1.05	0.45	0.45	0.20	0.20	0.20
Queue Length 95th (ft)	28	507	507	0	0	0	0	0
Control Delay (s)	66.2	69.8	69.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F	F					
Approach Delay (s)	69.8			0.0		0.0		
Approach LOS	F							

Intersection Summary			
Average Delay	27.7		
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	343	1885	1	963	533	393	98
v/c Ratio	0.29	1.21	no cap	0.43	0.54	0.18	0.20
Control Delay	9.9	108.6		1.1	21.0	8.6	31.9
Queue Delay	0.0	0.0		0.2	0.0	0.0	0.0
Total Delay	9.9	108.6	Error	1.3	21.0	8.6	31.9
Queue Length 50th (ft)	98	~456	0	0	90	53	52
Queue Length 95th (ft)	145	#720	0	20	145	74	96
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	2247	983	2144	480
Starvation Cap Reductn	0	0	0	561	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	1.21	1.00	0.57	0.54	0.18	0.20

Intersection Summary

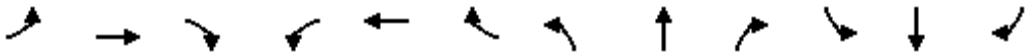
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	271	57	701	0	0	492
Future Volume (Veh/h)	271	57	701	0	0	492
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	295	62	762	0	0	535
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1030	381			762	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1030	381			762	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	90			100	
cM capacity (veh/h)	229	617			846	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	295	62	381	381	268	268
Volume Left	295	0	0	0	0	0
Volume Right	0	62	0	0	0	0
cSH	229	617	1700	1700	1700	1700
Volume to Capacity	1.29	0.10	0.22	0.22	0.16	0.16
Queue Length 95th (ft)	385	8	0	0	0	0
Control Delay (s)	199.9	11.5	0.0	0.0	0.0	0.0
Lane LOS	F	B				
Approach Delay (s)	167.2		0.0		0.0	
Approach LOS	F					

Intersection Summary			
Average Delay	36.1		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	26	491	0	0	0	0	486	18	21	743	0
Future Volume (Veh/h)	206	26	491	0	0	0	0	486	18	21	743	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	224	28	534	0	0	0	0	528	20	23	808	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1118	1402	404	1536	1392	274	808			548		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1118	1402	404	1536	1392	274	808			548		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	79	10	100	100	100	100			98		
cM capacity (veh/h)	159	136	596	7	138	724	813			1018		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	238	548	352	196	292	539
Volume Left	224	0	0	0	23	0
Volume Right	0	534	0	20	0	0
cSH	157	549	1700	1700	1018	1700
Volume to Capacity	1.51	1.00	0.21	0.12	0.02	0.32
Queue Length 95th (ft)	394	358	0	0	2	0
Control Delay (s)	313.1	65.7	0.0	0.0	0.9	0.0
Lane LOS	F	F			A	
Approach Delay (s)	140.6		0.0		0.3	
Approach LOS	F					

Intersection Summary				
Average Delay	51.2			
Intersection Capacity Utilization	64.9%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	852	452	71	1783	363	353
v/c Ratio	0.52	0.48	0.24	0.80	0.83	0.81
Control Delay	20.0	3.7	43.8	8.2	49.4	44.9
Queue Delay	0.1	0.0	0.0	16.1	63.6	63.4
Total Delay	20.1	3.7	43.8	24.2	112.9	108.3
Queue Length 50th (ft)	191	0	40	140	204	184
Queue Length 95th (ft)	250	56	m59	m177	#356	#331
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1631	936	295	2228	442	443
Starvation Cap Reductn	0	0	0	479	0	0
Spillback Cap Reductn	96	0	0	0	279	272
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.48	0.24	1.02	2.23	2.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	128	1318	1065	858	317	315	92	390
v/c Ratio	1.24	1.16	0.46	0.67	0.83	0.82	0.22	2.55
Control Delay	204.0	113.0	4.1	12.1	53.4	52.6	7.9	0.0
Queue Delay	0.0	1.9	8.3	51.1	0.0	0.0	0.0	0.9
Total Delay	204.0	114.9	12.4	63.2	53.4	52.6	7.9	0.9
Queue Length 50th (ft)	~78	~444	54	201	182	180	0	0
Queue Length 95th (ft)	#183	#581	m44	m151	#329	#325	38	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	103	1140	2304	1285	381	382	423	153
Starvation Cap Reductn	0	352	1199	540	0	0	0	0
Spillback Cap Reductn	0	65	87	0	0	0	4	7
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	1.67	0.96	1.15	0.83	0.82	0.22	2.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

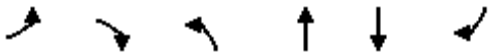
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	148	2690	409
v/c Ratio	0.29	1.05	0.16
Control Delay	33.3	47.3	5.2
Queue Delay	0.0	0.0	0.0
Total Delay	33.3	47.3	5.2
Queue Length 50th (ft)	41	604	24
Queue Length 95th (ft)	52	#1218	84
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1353	2564	2564
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.11	1.05	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1242	0	2299	499	0
Future Volume (Veh/h)	17	1242	0	2299	499	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	1350	0	2499	542	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked						
vC, conflicting volume	1792	181	542			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1792	181	542			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	75	0	100			
cM capacity (veh/h)	72	831	1023			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	18	675	675	1250	1250	181	181	181
Volume Left	18	0	0	0	0	0	0	0
Volume Right	0	675	675	0	0	0	0	0
cSH	72	831	831	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.81	0.81	0.73	0.73	0.11	0.11	0.11
Queue Length 95th (ft)	22	223	223	0	0	0	0	0
Control Delay (s)	70.8	25.1	25.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	D	D					
Approach Delay (s)	25.7			0.0		0.0		
Approach LOS	D							

Intersection Summary			
Average Delay	8.0		
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	489	1423	1	588	1075	559	118
v/c Ratio	0.42	0.91	no cap	0.30	1.16	0.26	0.25
Control Delay	11.4	10.9		7.3	115.6	9.2	32.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	11.4	10.9	Error	7.3	115.6	9.2	32.5
Queue Length 50th (ft)	154	0	0	65	~420	79	63
Queue Length 95th (ft)	222	#66	0	94	#553	106	113
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	1929	929	2144	480
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.91	1.00	0.30	1.16	0.26	0.25

Intersection Summary

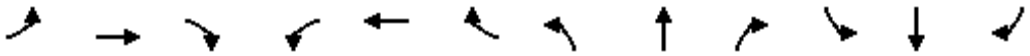
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	162	67	1155	0	0	381
Future Volume (Veh/h)	162	67	1155	0	0	381
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	176	73	1255	0	0	414
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1462	628			1255	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1462	628			1255	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	83			100	
cM capacity (veh/h)	120	426			550	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	176	73	628	628	207	207
Volume Left	176	0	0	0	0	0
Volume Right	0	73	0	0	0	0
cSH	120	426	1700	1700	1700	1700
Volume to Capacity	1.47	0.17	0.37	0.37	0.12	0.12
Queue Length 95th (ft)	310	15	0	0	0	0
Control Delay (s)	318.3	15.2	0.0	0.0	0.0	0.0
Lane LOS	F	C				
Approach Delay (s)	229.4		0.0		0.0	
Approach LOS	F					

Intersection Summary			
Average Delay	29.8		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	17	504	0	0	0	0	930	11	6	527	0
Future Volume (Veh/h)	215	17	504	0	0	0	0	930	11	6	527	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	234	18	548	0	0	0	0	1011	12	7	573	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1092	1610	286	1874	1604	512	573			1023		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1092	1610	286	1874	1604	512	573			1023		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	82	23	100	100	100	100			99		
cM capacity (veh/h)	168	102	710	9	103	507	996			674		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	243	557	674	349	198	382
Volume Left	234	0	0	0	7	0
Volume Right	0	548	0	12	0	0
cSH	164	648	1700	1700	674	1700
Volume to Capacity	1.48	0.86	0.40	0.21	0.01	0.22
Queue Length 95th (ft)	393	246	0	0	1	0
Control Delay (s)	299.1	35.0	0.0	0.0	0.5	0.0
Lane LOS	F	E			A	
Approach Delay (s)	115.2		0.0		0.2	
Approach LOS	F					

Intersection Summary				
Average Delay	38.4			
Intersection Capacity Utilization	55.7%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	1301	572	50	1820	389	382
v/c Ratio	0.73	0.55	0.17	0.82	0.89	0.86
Control Delay	23.3	3.9	45.2	9.8	55.6	51.3
Queue Delay	3.5	0.0	0.0	11.1	62.9	63.4
Total Delay	26.8	3.9	45.2	21.0	118.5	114.7
Queue Length 50th (ft)	350	0	28	142	223	209
Queue Length 95th (ft)	#485	61	m48	m178	#394	#377
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1774	1038	295	2223	442	445
Starvation Cap Reductn	0	0	0	408	0	0
Spillback Cap Reductn	372	0	0	0	295	293
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.55	0.17	1.00	2.65	2.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	187	1778	1047	867	389	389	97	159
v/c Ratio	1.75	1.56	0.45	0.67	1.02	1.02	0.23	1.04
Control Delay	388.8	282.6	4.5	15.2	88.1	86.7	7.8	0.0
Queue Delay	0.0	1.9	18.9	52.1	0.0	0.0	0.0	21.8
Total Delay	388.8	284.5	23.4	67.3	88.1	86.7	7.8	21.8
Queue Length 50th (ft)	~152	~751	46	236	~242	~240	0	0
Queue Length 95th (ft)	m#235	#895	m38	m171	#433	#431	38	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	107	1140	2304	1288	381	383	427	153
Starvation Cap Reductn	0	352	1272	656	0	0	0	0
Spillback Cap Reductn	0	249	159	0	0	0	11	17
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.75	2.26	1.01	1.37	1.02	1.02	0.23	1.17

Intersection Summary

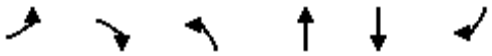
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	386	1585	704
v/c Ratio	0.58	0.65	0.29
Control Delay	34.5	11.1	6.9
Queue Delay	0.0	0.0	0.0
Total Delay	34.5	11.1	6.9
Queue Length 50th (ft)	103	212	64
Queue Length 95th (ft)	119	463	148
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1405	2429	2429
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.27	0.65	0.29

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	24	1571	0	1444	967	0
Future Volume (Veh/h)	24	1571	0	1444	967	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	26	1708	0	1570	1051	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked	0.96	0.96	0.96			
vC, conflicting volume	1836	350	1051			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1737	197	923			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	66	0	100			
cM capacity (veh/h)	76	782	709			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	26	854	854	785	785	350	350	350
Volume Left	26	0	0	0	0	0	0	0
Volume Right	0	854	854	0	0	0	0	0
cSH	76	782	782	1700	1700	1700	1700	1700
Volume to Capacity	0.34	1.09	1.09	0.46	0.46	0.21	0.21	0.21
Queue Length 95th (ft)	33	573	573	0	0	0	0	0
Control Delay (s)	75.8	82.0	82.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F	F					
Approach Delay (s)	81.9			0.0		0.0		
Approach LOS	F							

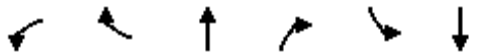
Intersection Summary			
Average Delay	32.6		
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	355	1970	1	1011	557	412	100
v/c Ratio	0.31	1.26	no cap	0.45	0.57	0.19	0.21
Control Delay	10.0	133.5		1.5	23.0	8.7	32.0
Queue Delay	0.0	0.0		0.3	0.0	0.0	0.0
Total Delay	10.0	133.5	Error	1.8	23.0	8.7	32.0
Queue Length 50th (ft)	102	~575	0	7	104	56	53
Queue Length 95th (ft)	151	#839	0	31	161	77	97
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	2235	972	2144	480
Starvation Cap Reductn	0	0	0	542	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	1.26	1.00	0.60	0.57	0.19	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

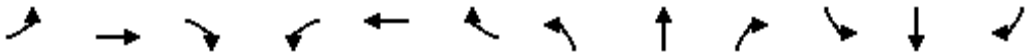
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	280	60	732	0	0	515
Future Volume (Veh/h)	280	60	732	0	0	515
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	304	65	796	0	0	560
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1076	398			796	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1076	398			796	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	89			100	
cM capacity (veh/h)	214	601			822	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	304	65	398	398	280	280
Volume Left	304	0	0	0	0	0
Volume Right	0	65	0	0	0	0
cSH	214	601	1700	1700	1700	1700
Volume to Capacity	1.42	0.11	0.23	0.23	0.16	0.16
Queue Length 95th (ft)	442	9	0	0	0	0
Control Delay (s)	256.7	11.7	0.0	0.0	0.0	0.0
Lane LOS	F	B				
Approach Delay (s)	213.6		0.0		0.0	
Approach LOS	F					

Intersection Summary			
Average Delay	45.7		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	27	510	0	0	0	0	505	18	22	775	0
Future Volume (Veh/h)	217	27	510	0	0	0	0	505	18	22	775	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	236	29	554	0	0	0	0	549	20	24	842	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1164	1459	421	1596	1449	284	842			569		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1164	1459	421	1596	1449	284	842			569		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	77	5	100	100	100	100			98		
cM capacity (veh/h)	147	125	581	3	127	712	789			999		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	250	568	366	203	305	561
Volume Left	236	0	0	0	24	0
Volume Right	0	554	0	20	0	0
cSH	145	532	1700	1700	999	1700
Volume to Capacity	1.72	1.07	0.22	0.12	0.02	0.33
Queue Length 95th (ft)	457	427	0	0	2	0
Control Delay (s)	406.7	86.5	0.0	0.0	0.9	0.0
Lane LOS	F	F			A	
Approach Delay (s)	184.5		0.0		0.3	
Approach LOS	F					

Intersection Summary				
Average Delay	67.1			
Intersection Capacity Utilization	67.5%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	879	462	73	1845	380	369
v/c Ratio	0.54	0.49	0.25	0.83	0.87	0.84
Control Delay	20.4	3.7	43.4	8.7	52.9	48.6
Queue Delay	0.1	0.0	0.0	24.8	62.7	62.9
Total Delay	20.5	3.7	43.4	33.4	115.7	111.5
Queue Length 50th (ft)	198	0	40	150	216	197
Queue Length 95th (ft)	260	56	m60	m191	#382	#358
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1625	940	295	2223	442	441
Starvation Cap Reductn	0	0	0	458	0	0
Spillback Cap Reductn	113	0	0	0	285	277
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.49	0.25	1.05	2.42	2.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	134	1367	1102	895	326	325	97	408
v/c Ratio	1.40	1.20	0.48	0.69	0.86	0.85	0.23	2.67
Control Delay	261.7	130.3	4.6	13.1	56.1	55.5	7.8	0.0
Queue Delay	0.0	1.9	14.6	51.0	0.0	0.0	0.0	0.9
Total Delay	261.7	132.1	19.2	64.0	56.1	55.5	7.8	0.9
Queue Length 50th (ft)	~90	~476	56	223	188	187	0	0
Queue Length 95th (ft)	#198	#613	m44	m155	#343	#341	38	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	96	1140	2304	1298	381	382	427	153
Starvation Cap Reductn	0	352	1202	548	0	0	0	0
Spillback Cap Reductn	0	88	161	0	0	0	5	7
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.40	1.73	1.00	1.19	0.86	0.85	0.23	2.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

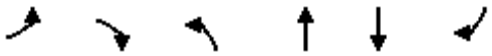
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	154	2797	422
v/c Ratio	0.30	1.09	0.16
Control Delay	33.4	63.8	5.2
Queue Delay	0.0	0.0	0.0
Total Delay	33.4	63.8	5.2
Queue Length 50th (ft)	42	~902	25
Queue Length 95th (ft)	53	#1284	86
Internal Link Dist (ft)	552	216	471
Turn Bay Length (ft)			
Base Capacity (vph)	1352	2562	2562
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.11	1.09	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1292	0	2388	516	0
Future Volume (Veh/h)	17	1292	0	2388	516	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	1404	0	2596	561	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					296	
pX, platoon unblocked						
vC, conflicting volume	1859	187	561			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1859	187	561			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	72	0	100			
cM capacity (veh/h)	65	823	1006			

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	18	702	702	1298	1298	187	187	187
Volume Left	18	0	0	0	0	0	0	0
Volume Right	0	702	702	0	0	0	0	0
cSH	65	823	823	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.85	0.85	0.76	0.76	0.11	0.11	0.11
Queue Length 95th (ft)	25	258	258	0	0	0	0	0
Control Delay (s)	80.5	28.9	28.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	D	D					
Approach Delay (s)	29.6			0.0		0.0		
Approach LOS	D							

Intersection Summary			
Average Delay	9.2		
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	511	1483	1	615	1126	584	122
v/c Ratio	0.44	0.95	no cap	0.32	1.22	0.27	0.25
Control Delay	11.7	15.8		7.8	142.0	9.3	32.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	11.7	15.8	Error	7.8	142.0	9.3	32.7
Queue Length 50th (ft)	163	0	0	73	~464	84	65
Queue Length 95th (ft)	235	#153	0	103	#598	111	115
Internal Link Dist (ft)	267		376		220		209
Turn Bay Length (ft)							
Base Capacity (vph)	1163	1560	1	1923	921	2144	480
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.95	1.00	0.32	1.22	0.27	0.25

Intersection Summary

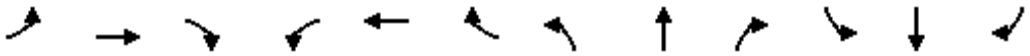
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	165	71	1206	0	0	398
Future Volume (Veh/h)	165	71	1206	0	0	398
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	179	77	1311	0	0	433
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1528	656			1311	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1528	656			1311	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	81			100	
cM capacity (veh/h)	108	408			524	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	179	77	656	656	216	216
Volume Left	179	0	0	0	0	0
Volume Right	0	77	0	0	0	0
cSH	108	408	1700	1700	1700	1700
Volume to Capacity	1.66	0.19	0.39	0.39	0.13	0.13
Queue Length 95th (ft)	344	17	0	0	0	0
Control Delay (s)	401.4	15.9	0.0	0.0	0.0	0.0
Lane LOS	F	C				
Approach Delay (s)	285.4		0.0		0.0	
Approach LOS	F					

Intersection Summary			
Average Delay	36.5		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	17	519	0	0	0	0	970	12	7	546	0
Future Volume (Veh/h)	226	17	519	0	0	0	0	970	12	7	546	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	246	18	564	0	0	0	0	1054	13	8	593	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1136	1676	296	1946	1670	534	593			1067		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1136	1676	296	1946	1670	534	593			1067		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	81	19	100	100	100	100			99		
cM capacity (veh/h)	155	93	700	6	94	491	979			649		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	255	573	703	364	206	395
Volume Left	246	0	0	0	8	0
Volume Right	0	564	0	13	0	0
cSH	152	635	1700	1700	649	1700
Volume to Capacity	1.68	0.90	0.41	0.21	0.01	0.23
Queue Length 95th (ft)	454	282	0	0	1	0
Control Delay (s)	384.9	41.5	0.0	0.0	0.6	0.0
Lane LOS	F	E			A	
Approach Delay (s)	147.3		0.0		0.2	
Approach LOS	F					

Intersection Summary				
Average Delay	48.9			
Intersection Capacity Utilization	57.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	1347	584	51	1873	408	398
v/c Ratio	0.76	0.56	0.17	0.84	0.93	0.90
Control Delay	24.2	3.9	45.1	10.8	62.5	56.3
Queue Delay	6.2	0.0	0.0	15.9	59.6	61.4
Total Delay	30.4	3.9	45.1	26.7	122.1	117.7
Queue Length 50th (ft)	371	0	29	146	237	221
Queue Length 95th (ft)	#516	61	m47	m188	#421	#401
Internal Link Dist (ft)	357			211		186
Turn Bay Length (ft)						
Base Capacity (vph)	1774	1044	295	2223	442	445
Starvation Cap Reductn	0	0	0	388	0	0
Spillback Cap Reductn	377	0	0	0	295	293
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.56	0.17	1.02	2.78	2.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	196	1847	1077	904	399	400	100	167
v/c Ratio	1.94	1.62	0.47	0.70	1.05	1.04	0.23	1.09
Control Delay	470.9	308.7	4.9	16.5	95.0	94.1	7.7	0.0
Queue Delay	0.0	1.9	28.1	51.9	0.0	0.0	0.1	7.1
Total Delay	470.9	310.6	33.0	68.5	95.0	94.1	7.8	7.1
Queue Length 50th (ft)	~167	~797	47	259	~262	~262	0	0
Queue Length 95th (ft)	m#242	m#931	m38	m176	#447	#447	39	0
Internal Link Dist (ft)		211	72			213		292
Turn Bay Length (ft)								
Base Capacity (vph)	101	1140	2304	1286	381	383	429	153
Starvation Cap Reductn	0	352	1272	648	0	0	0	0
Spillback Cap Reductn	0	268	269	0	0	0	22	29
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.94	2.34	1.04	1.42	1.05	1.04	0.25	1.35

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,283	1,255	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,973	1,361	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,244	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,973	9,276	pcph	0.86
Exiting General Purpose Lanes	6,612	9,276	pcph	0.71
Off Ramp	1,361	2,100	pcph	0.65
Ramp Influence Area	4,244	4,400	pcph	0.96

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	39.3	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.420	
Average Speed in Ramp Influence Area, S_R	53.5	mph
Average Flow in Outer Lanes, v_{OA}	1,865	pcphpl
Average Speed in Outer Lanes, S_O	64.5	mph
Average Speed for Segment, S	58.2	mph
Density across All Lanes, D	34.3	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,028	409	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	6,599	443	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,127	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,599	9,276	pcph	0.71
Exiting General Purpose Lanes	6,156	9,276	pcph	0.66
Off Ramp	443	2,100	pcph	0.21
Ramp Influence Area	3,127	4,400	pcph	0.71

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	29.4	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.338	
Average Speed in Ramp Influence Area, S_R	55.2	mph
Average Flow in Outer Lanes, v_{OA}	1,736	pcphpl
Average Speed in Outer Lanes, S_O	65.0	mph
Average Speed for Segment, S	60.0	mph
Density across All Lanes, D	27.5	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,619	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,538	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.66	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	24.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,355	914	264	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,806	991	286	0	pcph

Weaving Flow Rate, vW	1,277	Total Flow Rate, v	7,083
Non-Weaving Flow Rate, vNW	5,806	Volume Ratio, VR	0.180

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,336	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,059	pchpl
Demand Flow-Based Capacity, c_{IW}	12,922	pch
Weaving Segment Capacity, c_W	9,995	vph
Adjusted Weaving Area Capacity, c_{wa}	9,995	vph
Volume-to-Capacity Ratio, v/c	0.69	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,277	lc/h
Weaving Lane Change Rate, LC_W	1,348	lc/h
Non-weaving Vehicle Index, I_{NW}	543	
Non-weaving Lane Change Rate, LC_{NW}	740	lc/h
Total Lane Change Rate, LC_{ALL}	2,089	lc/h
Weaving Intensity Factor, W	0.426	
Average Weaving Speed, S_W	47.9	mph
Average Non-Weaving Speed, S_{NW}	45.9	mph
Average Speed, S	46.2	mph
Density, D	30.6	pcpmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,151	9,276	pcph	0.66
Exiting General Purpose Lanes	6,856	11,595	pcph	0.59
On Ramp	991	2,100	pcph	0.47
Off Ramp	286	2,100	pcph	0.14

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,269	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,716	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.74	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.3	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	28.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

Entering General Purpose Lanes - Demand and Capacity

Volume, V	6,269	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,716	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.74	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.3	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	28.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	58.3	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	34.2	pcphpl
Flow Rate, vp	1,995	pcphpl	Level of Service, LOS	D	
Volume-to-Capacity Ratio, v/c	0.86				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	6,269	1,031	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	6,863	1,118	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,863	9,276	pcph	0.74
Exiting General Purpose Lanes	7,981	9,276	pcph	0.86
On Ramp	1,118	2,100	pcph	0.53

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,300	306	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	7,992	329	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,973	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,992	11,595	pcph	0.69
Exiting General Purpose Lanes	7,663	11,595	pcph	0.66
Off Ramp	329	2,100	pcph	0.16
Ramp Influence Area	2,973	4,400	pcph	0.68

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	28.5	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.328	
Average Speed in Ramp Influence Area, S_R	55.4	mph
Average Flow in Outer Lanes, v_{OA}	1,673	pcphpl
Average Speed in Outer Lanes, S_O	65.3	mph
Average Speed for Segment, S	61.2	mph
Density across All Lanes, D	25.8	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar		Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe		Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident		Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,994	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,531	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.66	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	24.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,994	588	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	8,620	638	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,118	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,620	9,276	pcph	0.93
Exiting General Purpose Lanes	7,982	11,595	pcph	0.69
Off Ramp	638	2,100	pcph	0.30
Ramp Influence Area	4,118	4,400	pcph	0.94

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	26.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.355	
Average Speed in Ramp Influence Area, S_R	54.8	mph
Average Flow in Outer Lanes, v_{OA}	2,251	pcphpl
Average Speed in Outer Lanes, S_O	63.0	mph
Average Speed for Segment, S	58.8	mph
Density across All Lanes, D	36.6	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,406	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	2,051	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	0.88	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	57.3	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	35.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	E	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,164	575	1,242	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,599	623	1,347	0	pcph

Weaving Flow Rate, vW	1,970	Total Flow Rate, v	7,569
Non-Weaving Flow Rate, vNW	5,599	Volume Ratio, VR	0.260

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,162	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,097	pchpl
Demand Flow-Based Capacity, c_{IW}	8,952	pch
Weaving Segment Capacity, c_W	8,952	vph
Adjusted Weaving Area Capacity, c_{wa}	8,952	vph
Volume-to-Capacity Ratio, v/c	0.82	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,970	lc/h
Weaving Lane Change Rate, LC_W	2,557	lc/h
Non-weaving Vehicle Index, I_{NW}	1,265	
Non-weaving Lane Change Rate, LC_{NW}	1,415	lc/h
Total Lane Change Rate, LC_{ALL}	3,973	lc/h
Weaving Intensity Factor, W	0.353	
Average Weaving Speed, S_W	49.7	mph
Average Non-Weaving Speed, S_{NW}	40.4	mph
Average Speed, S	42.5	mph
Density, D	35.6	pcpmpl
Level of Service, LOS	E	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,202	9,276	pcph	0.88
Exiting General Purpose Lanes	7,479	11,595	pcph	0.65
On Ramp	623	2,100	pcph	0.30
Off Ramp	1,347	2,100	pcph	0.64

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,228	1,298	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	9,008	1,407	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,721	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,008	9,276	pcph	0.97
Exiting General Purpose Lanes	7,601	9,276	pcph	0.82
Off Ramp	1,407	2,100	pcph	0.67
Ramp Influence Area	4,721	4,400	pcph	**1.07**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	43.6	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.425	
Average Speed in Ramp Influence Area, S_R	53.4	mph
Average Flow in Outer Lanes, v_{OA}	2,143	pcphpl
Average Speed in Outer Lanes, S_O	63.4	mph
Average Speed for Segment, S	57.8	mph
Density across All Lanes, D	39.0	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,930	1,739	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,587	1,885	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,371	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,587	9,276	pcph	0.82
Exiting General Purpose Lanes	5,702	9,276	pcph	0.61
Off Ramp	1,885	2,100	pcph	0.90
Ramp Influence Area	4,371	4,400	pcph	0.99

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	41.8	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.468	
Average Speed in Ramp Influence Area, S_R	52.6	mph
Average Flow in Outer Lanes, v_{OA}	1,608	pcphpl
Average Speed in Outer Lanes, S_O	65.5	mph
Average Speed for Segment, S	57.4	mph
Density across All Lanes, D	33.0	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,191	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,421	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.61	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	23.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,609	145	582	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,998	157	631	0	pcph

Weaving Flow Rate, vW	788	Total Flow Rate, v	5,786
Non-Weaving Flow Rate, vNW	4,998	Volume Ratio, VR	0.136

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	3,895	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,069	pchpl
Demand Flow-Based Capacity, c_{IW}	17,104	pch
Weaving Segment Capacity, c_W	10,046	vph
Adjusted Weaving Area Capacity, c_{wa}	10,046	vph
Volume-to-Capacity Ratio, v/c	0.56	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	788	lc/h
Weaving Lane Change Rate, LC_W	741	lc/h
Non-weaving Vehicle Index, I_{NW}	316	
Non-weaving Lane Change Rate, LC_{NW}	410	lc/h
Total Lane Change Rate, LC_{ALL}	1,151	lc/h
Weaving Intensity Factor, W	0.362	
Average Weaving Speed, S_W	49.4	mph
Average Non-Weaving Speed, S_{NW}	50.7	mph
Average Speed, S	50.5	mph
Density, D	22.9	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,683	9,276	pcph	0.61
Exiting General Purpose Lanes	5,209	11,595	pcph	0.45
On Ramp	157	2,100	pcph	0.07
Off Ramp	631	2,100	pcph	0.30

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,754	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,301	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.56	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	21.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,155	209	599	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,505	227	649	0	pcph

Weaving Flow Rate, vW	876	Total Flow Rate, v	5,381
Non-Weaving Flow Rate, vNW	4,505	Volume Ratio, VR	0.163

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,159	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,076	pchpl
Demand Flow-Based Capacity, c_{IW}	14,314	pch
Weaving Segment Capacity, c_W	10,079	vph
Adjusted Weaving Area Capacity, c_{wa}	10,079	vph
Volume-to-Capacity Ratio, v/c	0.52	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	876	lc/h
Weaving Lane Change Rate, LC_W	967	lc/h
Non-weaving Vehicle Index, I_{NW}	444	
Non-weaving Lane Change Rate, LC_{NW}	500	lc/h
Total Lane Change Rate, LC_{ALL}	1,466	lc/h
Weaving Intensity Factor, W	0.309	
Average Weaving Speed, S_W	50.8	mph
Average Non-Weaving Speed, S_{NW}	50.4	mph
Average Speed, S	50.5	mph
Density, D	21.3	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,205	9,276	pcph	0.56
Exiting General Purpose Lanes	4,782	11,595	pcph	0.41
On Ramp	227	2,100	pcph	0.11
Off Ramp	649	2,100	pcph	0.31

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,364	778	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,778	844	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,559	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,778	9,276	pcph	0.52
Exiting General Purpose Lanes	3,934	9,276	pcph	0.42
Off Ramp	844	2,100	pcph	0.40
Ramp Influence Area	2,559	4,400	pcph	0.58

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	21.7	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.374	
Average Speed in Ramp Influence Area, S_R	54.5	mph
Average Flow in Outer Lanes, v_{OA}	1,110	pcphpl
Average Speed in Outer Lanes, S_O	67.5	mph
Average Speed for Segment, S	59.8	mph
Density across All Lanes, D	20.0	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	3,586	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	982	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.42	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	15.9	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	B	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	3,586	217	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	3,926	235	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.188	
Flow Rate in Lanes 1 and 2, v_{12}	1,570	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	3,926	9,276	pcph	0.42
Exiting General Purpose Lanes	4,162	9,276	pcph	0.45
On Ramp	235	2,100	pcph	0.11
Ramp Influence Area	1,806	4,600	pcph	0.39

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	17.6	pcpmpl
Level of Service, LOS	B	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.318	
Average Speed in Ramp Influence Area, S_R	55.6	mph
Average Flow in Outer Lanes, v_{OA}	1,178	pcphpl
Average Speed in Outer Lanes, S_O	59.5	mph
Average Speed for Segment, S	57.7	mph
Density across All Lanes, D	18.0	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,805	503	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,260	545	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,601	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,260	9,276	pcph	0.57
Exiting General Purpose Lanes	4,715	9,276	pcph	0.51
Off Ramp	545	2,100	pcph	0.26
Ramp Influence Area	2,601	4,400	pcph	0.59

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	25.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.347	
Average Speed in Ramp Influence Area, S_R	55.0	mph
Average Flow in Outer Lanes, v_{OA}	1,330	pcphpl
Average Speed in Outer Lanes, S_O	66.6	mph
Average Speed for Segment, S	60.3	mph
Density across All Lanes, D	21.8	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,302	465	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,709	504	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,338	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,709	9,276	pcph	0.51
Exiting General Purpose Lanes	4,205	9,276	pcph	0.45
Off Ramp	504	2,100	pcph	0.24
Ramp Influence Area	2,338	4,400	pcph	0.53

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	22.6	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.343	
Average Speed in Ramp Influence Area, S_R	55.1	mph
Average Flow in Outer Lanes, v_{OA}	1,186	pcphpl
Average Speed in Outer Lanes, S_O	67.2	mph
Average Speed for Segment, S	60.6	mph
Density across All Lanes, D	19.4	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	3,837	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,050	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.45	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	17.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	B	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Existing plus Project (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,692	794	145	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,003	861	157	0	pcph

Weaving Flow Rate, vW	1,018	Total Flow Rate, v	5,021
Non-Weaving Flow Rate, vNW	4,003	Volume Ratio, VR	0.203

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Existing plus Project (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,565	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,041	pchpl
Demand Flow-Based Capacity, c_{IW}	11,491	pch
Weaving Segment Capacity, c_W	9,910	vph
Adjusted Weaving Area Capacity, c_{wa}	9,910	vph
Volume-to-Capacity Ratio, v/c	0.49	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,018	lc/h
Weaving Lane Change Rate, LC_W	1,089	lc/h
Non-weaving Vehicle Index, I_{NW}	375	
Non-weaving Lane Change Rate, LC_{NW}	369	lc/h
Total Lane Change Rate, LC_{ALL}	1,458	lc/h
Weaving Intensity Factor, W	0.321	
Average Weaving Speed, S_W	50.5	mph
Average Non-Weaving Speed, S_{NW}	49.7	mph
Average Speed, S	49.9	mph
Density, D	20.1	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,200	9,276	pcph	0.45
Exiting General Purpose Lanes	4,904	11,595	pcph	0.42
On Ramp	861	2,100	pcph	0.41
Off Ramp	157	2,100	pcph	0.07

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,486	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,228	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.53	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	19.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

Entering General Purpose Lanes - Demand and Capacity

Volume, V	4,486	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,228	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.53	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	19.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	61.8	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	26.0	pcphpl
Flow Rate, vp	1,608	pcphpl	Level of Service, LOS	D	
Volume-to-Capacity Ratio, v/c	0.69				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	4,486	1,403	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,911	1,521	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,911	9,276	pcph	0.53
Exiting General Purpose Lanes	6,432	9,276	pcph	0.69
On Ramp	1,521	2,100	pcph	0.72

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,889	86	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	6,447	92	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,441	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,447	11,595	pcph	0.56
Exiting General Purpose Lanes	6,354	11,595	pcph	0.55
Off Ramp	92	2,100	pcph	0.04
Ramp Influence Area	2,441	4,400	pcph	0.55

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	24.0	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.306	
Average Speed in Ramp Influence Area, S_R	55.8	mph
Average Flow in Outer Lanes, v_{OA}	1,335	pcphpl
Average Speed in Outer Lanes, S_O	66.6	mph
Average Speed for Segment, S	62.0	mph
Density across All Lanes, D	20.6	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

General Purpose Lanes - Demand and Capacity

Volume, V	5,803	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,271	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.55	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	20.5	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Diverge Segment

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,803	233	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	7,151	253	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,261	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,151	9,276	pcph	0.77
Exiting General Purpose Lanes	6,899	11,595	pcph	0.59
Off Ramp	253	2,100	pcph	0.12
Ramp Influence Area	3,261	4,400	pcph	0.74

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	18.8	pcpmpl
Level of Service, LOS	B	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.321	
Average Speed in Ramp Influence Area, S_R	55.5	mph
Average Flow in Outer Lanes, v_{OA}	1,945	pcphpl
Average Speed in Outer Lanes, S_O	64.2	mph
Average Speed for Segment, S	59.9	mph
Density across All Lanes, D	29.8	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Existing plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,570	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,783	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	0.77	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	60.8	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	29.3	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Existing plus Project (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,847	984	723	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,255	1,067	784	0	pcph

Weaving Flow Rate, vW	1,851	Total Flow Rate, v	7,106
Non-Weaving Flow Rate, vNW	5,255	Volume Ratio, VR	0.260

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Existing plus Project (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,164	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,097	pchpl
Demand Flow-Based Capacity, c_{IW}	8,946	pch
Weaving Segment Capacity, c_W	8,946	vph
Adjusted Weaving Area Capacity, c_{wa}	8,946	vph
Volume-to-Capacity Ratio, v/c	0.77	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,851	lc/h
Weaving Lane Change Rate, LC_W	2,438	lc/h
Non-weaving Vehicle Index, I_{NW}	1,188	
Non-weaving Lane Change Rate, LC_{NW}	1,344	lc/h
Total Lane Change Rate, LC_{ALL}	3,783	lc/h
Weaving Intensity Factor, W	0.339	
Average Weaving Speed, S_W	50.0	mph
Average Non-Weaving Speed, S_{NW}	41.8	mph
Average Speed, S	43.6	mph
Density, D	32.6	pcpmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,132	9,276	pcph	0.77
Exiting General Purpose Lanes	7,415	11,595	pcph	0.64
On Ramp	1,067	2,100	pcph	0.51
Off Ramp	784	2,100	pcph	0.37

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,512	1,002	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	8,223	1,086	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,198	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,223	9,276	pcph	0.89
Exiting General Purpose Lanes	7,137	9,276	pcph	0.77
Off Ramp	1,086	2,100	pcph	0.52
Ramp Influence Area	4,198	4,400	pcph	0.95

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	39.1	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.396	
Average Speed in Ramp Influence Area, S_R	54.0	mph
Average Flow in Outer Lanes, v_{OA}	2,013	pcphpl
Average Speed in Outer Lanes, S_O	64.0	mph
Average Speed for Segment, S	58.5	mph
Density across All Lanes, D	35.2	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,510	1,470	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,127	1,594	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,006	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,127	9,276	pcph	0.77
Exiting General Purpose Lanes	5,533	9,276	pcph	0.60
Off Ramp	1,594	2,100	pcph	0.76
Ramp Influence Area	4,006	4,400	pcph	0.91

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	38.7	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.441	
Average Speed in Ramp Influence Area, S_R	53.1	mph
Average Flow in Outer Lanes, v_{OA}	1,560	pcphpl
Average Speed in Outer Lanes, S_O	65.7	mph
Average Speed for Segment, S	58.0	mph
Density across All Lanes, D	30.7	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,040	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,379	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.59	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	22.3	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,524	148	516	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,905	160	559	0	pcph

Weaving Flow Rate, vW	720	Total Flow Rate, v	5,625
Non-Weaving Flow Rate, vNW	4,905	Volume Ratio, VR	0.128

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Existing Plus Project (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	3,813	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,076	pchpl
Demand Flow-Based Capacity, c_{IW}	18,205	pch
Weaving Segment Capacity, c_W	10,076	vph
Adjusted Weaving Area Capacity, c_{wa}	10,076	vph
Volume-to-Capacity Ratio, v/c	0.54	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	720	lc/h
Weaving Lane Change Rate, LC_W	673	lc/h
Non-weaving Vehicle Index, I_{NW}	310	
Non-weaving Lane Change Rate, LC_{NW}	390	lc/h
Total Lane Change Rate, LC_{ALL}	1,063	lc/h
Weaving Intensity Factor, W	0.340	
Average Weaving Speed, S_W	50.0	mph
Average Non-Weaving Speed, S_{NW}	51.3	mph
Average Speed, S	51.1	mph
Density, D	22.0	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,517	9,276	pcph	0.59
Exiting General Purpose Lanes	5,118	11,595	pcph	0.44
On Ramp	160	2,100	pcph	0.08
Off Ramp	559	2,100	pcph	0.27

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,672	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,279	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.55	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	20.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,051	259	621	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,392	281	673	0	pcph

Weaving Flow Rate, vW	954	Total Flow Rate, v	5,346
Non-Weaving Flow Rate, vNW	4,392	Volume Ratio, VR	0.178

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Existing Plus Project (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,317	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,064	pchpl
Demand Flow-Based Capacity, c_{IW}	13,056	pch
Weaving Segment Capacity, c_W	10,020	vph
Adjusted Weaving Area Capacity, c_{wa}	10,020	vph
Volume-to-Capacity Ratio, v/c	0.52	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	954	lc/h
Weaving Lane Change Rate, LC_W	1,045	lc/h
Non-weaving Vehicle Index, I_{NW}	433	
Non-weaving Lane Change Rate, LC_{NW}	476	lc/h
Total Lane Change Rate, LC_{ALL}	1,521	lc/h
Weaving Intensity Factor, W	0.318	
Average Weaving Speed, S_W	50.6	mph
Average Non-Weaving Speed, S_{NW}	49.9	mph
Average Speed, S	50.0	mph
Density, D	21.4	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,114	9,276	pcph	0.55
Exiting General Purpose Lanes	4,722	11,595	pcph	0.41
On Ramp	281	2,100	pcph	0.13
Off Ramp	673	2,100	pcph	0.32

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,310	726	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,718	787	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,501	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,718	9,276	pcph	0.51
Exiting General Purpose Lanes	3,931	9,276	pcph	0.42
Off Ramp	787	2,100	pcph	0.37
Ramp Influence Area	2,501	4,400	pcph	0.57

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	21.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.369	
Average Speed in Ramp Influence Area, S_R	54.6	mph
Average Flow in Outer Lanes, v_{OA}	1,109	pcphpl
Average Speed in Outer Lanes, S_O	67.5	mph
Average Speed for Segment, S	60.0	mph
Density across All Lanes, D	19.7	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	3,584	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	981	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.42	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	15.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	B	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	3,584	260	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	3,923	282	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Existing Plus Project (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.183	
Flow Rate in Lanes 1 and 2, v_{12}	1,569	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	3,923	9,276	pcph	0.42
Exiting General Purpose Lanes	4,205	9,276	pcph	0.45
On Ramp	282	2,100	pcph	0.13
Ramp Influence Area	1,851	4,600	pcph	0.40

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	18.0	pcpmpl
Level of Service, LOS	B	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.319	
Average Speed in Ramp Influence Area, S_R	55.6	mph
Average Flow in Outer Lanes, v_{OA}	1,177	pcphpl
Average Speed in Outer Lanes, S_O	59.5	mph
Average Speed for Segment, S	57.7	mph
Density across All Lanes, D	18.2	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,688	1,905	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	9,511	2,065	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,312	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,511	9,276	pcph	**1.03**
Exiting General Purpose Lanes	7,446	9,276	pcph	0.80
Off Ramp	2,065	2,100	pcph	0.98
Ramp Influence Area	5,312	4,400	pcph	**1.21**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,783	666	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,426	722	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,645	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,426	9,276	pcph	0.80
Exiting General Purpose Lanes	6,704	9,276	pcph	0.72
Off Ramp	722	2,100	pcph	0.34
Ramp Influence Area	3,645	4,400	pcph	0.83

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	33.9	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.363	
Average Speed in Ramp Influence Area, S_R	54.7	mph
Average Flow in Outer Lanes, v_{OA}	1,890	pcphpl
Average Speed in Outer Lanes, S_O	64.4	mph
Average Speed for Segment, S	59.2	mph
Density across All Lanes, D	31.3	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,117	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,674	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.72	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.5	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	27.2	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,778	1,060	339	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,265	1,149	368	0	pcph

Weaving Flow Rate, vW	1,517	Total Flow Rate, v	7,781
Non-Weaving Flow Rate, vNW	6,265	Volume Ratio, VR	0.195

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,484	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,048	pchpl
Demand Flow-Based Capacity, c_{IW}	11,954	pch
Weaving Segment Capacity, c_W	9,939	vph
Adjusted Weaving Area Capacity, c_{wa}	9,939	vph
Volume-to-Capacity Ratio, v/c	0.76	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,517	lc/h
Weaving Lane Change Rate, LC_W	1,588	lc/h
Non-weaving Vehicle Index, I_{NW}	586	
Non-weaving Lane Change Rate, LC_{NW}	835	lc/h
Total Lane Change Rate, LC_{ALL}	2,423	lc/h
Weaving Intensity Factor, W	0.479	
Average Weaving Speed, S_W	46.7	mph
Average Non-Weaving Speed, S_{NW}	43.5	mph
Average Speed, S	44.1	mph
Density, D	35.3	pcpmpl
Level of Service, LOS	E	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,697	9,276	pcph	0.72
Exiting General Purpose Lanes	7,478	11,595	pcph	0.64
On Ramp	1,149	2,100	pcph	0.55
Off Ramp	368	2,100	pcph	0.18

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,838	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,871	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.81	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	59.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	31.2	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

Entering General Purpose Lanes - Demand and Capacity

Volume, V	6,838	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,871	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.81	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	59.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	31.2	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	53.0	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	42.7	pcphpl
Flow Rate, vp	2,262	pcphpl	Level of Service, LOS	E	
Volume-to-Capacity Ratio, v/c	0.98				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	6,838	1,441	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,486	1,562	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,486	9,276	pcph	0.81
Exiting General Purpose Lanes	9,048	9,276	pcph	0.98
On Ramp	1,562	2,100	pcph	0.74

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,279	339	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	9,063	364	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,367	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,063	11,595	pcph	0.78
Exiting General Purpose Lanes	8,699	11,595	pcph	0.75
Off Ramp	364	2,100	pcph	0.17
Ramp Influence Area	3,367	4,400	pcph	0.77

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	31.9	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.331	
Average Speed in Ramp Influence Area, S_R	55.3	mph
Average Flow in Outer Lanes, v_{OA}	1,899	pcphpl
Average Speed in Outer Lanes, S_O	64.4	mph
Average Speed for Segment, S	60.7	mph
Density across All Lanes, D	29.5	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

General Purpose Lanes - Demand and Capacity

Volume, V	7,940	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,738	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.75	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.1	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	28.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,940	609	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	9,785	660	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,639	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,785	9,276	pcph	**1.05**
Exiting General Purpose Lanes	9,125	11,595	pcph	0.79
Off Ramp	660	2,100	pcph	0.31
Ramp Influence Area	4,639	4,400	pcph	**1.05**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	7,331	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	2,347	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	1.01	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	-	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	-	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,899	889	1,432	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,396	964	1,553	0	pcph

Weaving Flow Rate, vW	2,516	Total Flow Rate, v	8,912
Non-Weaving Flow Rate, vNW	6,396	Volume Ratio, VR	0.282

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,395	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,079	pchpl
Demand Flow-Based Capacity, c_{IW}	8,252	pch
Weaving Segment Capacity, c_W	8,252	vph
Adjusted Weaving Area Capacity, c_{wa}	8,252	vph
Volume-to-Capacity Ratio, v/c	**1.05**	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	2,516	lc/h
Weaving Lane Change Rate, LC_W	3,104	lc/h
Non-weaving Vehicle Index, I_{NW}	1,445	
Non-weaving Lane Change Rate, LC_{NW}	1,923	lc/h
Total Lane Change Rate, LC_{ALL}	5,027	lc/h
Weaving Intensity Factor, W	0.425	
Average Weaving Speed, S_W	47.9	mph
Average Non-Weaving Speed, S_{NW}	35.2	mph
Average Speed, S	38.1	mph
Density, D	-	pcpmpl
Level of Service, LOS	F	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,387	9,276	pcph	**1.01**
Exiting General Purpose Lanes	8,798	11,595	pcph	0.76
On Ramp	964	2,100	pcph	0.46
Off Ramp	1,553	2,100	pcph	0.74

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	9,433	1,529	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	10,327	1,658	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,437	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	10,327	9,276	pcph	**1.11**
Exiting General Purpose Lanes	8,669	9,276	pcph	0.93
Off Ramp	1,658	2,100	pcph	0.79
Ramp Influence Area	5,437	4,400	pcph	**1.24**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,904	2,050	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	8,653	2,223	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,026	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,653	9,276	pcph	0.93
Exiting General Purpose Lanes	6,430	9,276	pcph	0.69
Off Ramp	2,223	2,100	pcph	**1.06**
Ramp Influence Area	5,026	4,400	pcph	**1.14**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,854	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,602	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.69	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.8	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	25.9	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,131	199	723	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,563	216	784	0	pcph

Weaving Flow Rate, vW	1,000	Total Flow Rate, v	6,563
Non-Weaving Flow Rate, vNW	5,563	Volume Ratio, VR	0.152

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,055	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,057	pchpl
Demand Flow-Based Capacity, c_{IW}	15,297	pch
Weaving Segment Capacity, c_W	9,986	vph
Adjusted Weaving Area Capacity, c_{wa}	9,986	vph
Volume-to-Capacity Ratio, v/c	0.64	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,000	lc/h
Weaving Lane Change Rate, LC_W	952	lc/h
Non-weaving Vehicle Index, I_{NW}	352	
Non-weaving Lane Change Rate, LC_{NW}	526	lc/h
Total Lane Change Rate, LC_{ALL}	1,479	lc/h
Weaving Intensity Factor, W	0.441	
Average Weaving Speed, S_W	47.5	mph
Average Non-Weaving Speed, S_{NW}	48.4	mph
Average Speed, S	48.3	mph
Density, D	27.2	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,409	9,276	pcph	0.69
Exiting General Purpose Lanes	5,840	11,595	pcph	0.50
On Ramp	216	2,100	pcph	0.10
Off Ramp	784	2,100	pcph	0.37

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,330	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,459	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.63	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	23.6	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,671	277	659	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,064	300	714	0	pcph

Weaving Flow Rate, vW	1,015	Total Flow Rate, v	6,079
Non-Weaving Flow Rate, vNW	5,064	Volume Ratio, VR	0.167

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,201	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,073	pchpl
Demand Flow-Based Capacity, c_{IW}	13,958	pch
Weaving Segment Capacity, c_W	10,063	vph
Adjusted Weaving Area Capacity, c_{wa}	10,063	vph
Volume-to-Capacity Ratio, v/c	0.59	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,015	lc/h
Weaving Lane Change Rate, LC_W	1,105	lc/h
Non-weaving Vehicle Index, I_{NW}	499	
Non-weaving Lane Change Rate, LC_{NW}	615	lc/h
Total Lane Change Rate, LC_{ALL}	1,720	lc/h
Weaving Intensity Factor, W	0.351	
Average Weaving Speed, S_W	49.7	mph
Average Non-Weaving Speed, S_{NW}	48.8	mph
Average Speed, S	48.9	mph
Density, D	24.9	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,835	9,276	pcph	0.63
Exiting General Purpose Lanes	5,421	11,595	pcph	0.47
On Ramp	300	2,100	pcph	0.14
Off Ramp	714	2,100	pcph	0.34

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,948	966	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,417	1,047	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,952	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,417	9,276	pcph	0.58
Exiting General Purpose Lanes	4,369	9,276	pcph	0.47
Off Ramp	1,047	2,100	pcph	0.50
Ramp Influence Area	2,952	4,400	pcph	0.67

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	25.1	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.392	
Average Speed in Ramp Influence Area, S_R	54.1	mph
Average Flow in Outer Lanes, v_{OA}	1,232	pcphpl
Average Speed in Outer Lanes, S_O	67.0	mph
Average Speed for Segment, S	59.3	mph
Density across All Lanes, D	22.8	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	3,982	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,090	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.47	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	17.6	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	B	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	3,982	482	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,359	523	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.152	
Flow Rate in Lanes 1 and 2, v_{12}	1,744	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,359	9,276	pcph	0.47
Exiting General Purpose Lanes	4,882	9,276	pcph	0.53
On Ramp	523	2,100	pcph	0.25
Ramp Influence Area	2,266	4,600	pcph	0.49

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	21.1	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.332	
Average Speed in Ramp Influence Area, S_R	55.3	mph
Average Flow in Outer Lanes, v_{OA}	1,308	pcphpl
Average Speed in Outer Lanes, S_O	59.0	mph
Average Speed for Segment, S	57.2	mph
Density across All Lanes, D	21.3	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,283	1,314	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	6,878	1,425	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,802	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,878	9,276	pcph	0.74
Exiting General Purpose Lanes	5,454	9,276	pcph	0.59
Off Ramp	1,425	2,100	pcph	0.68
Ramp Influence Area	3,802	4,400	pcph	0.86

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	35.5	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.426	
Average Speed in Ramp Influence Area, S_R	53.4	mph
Average Flow in Outer Lanes, v_{OA}	1,538	pcphpl
Average Speed in Outer Lanes, S_O	65.8	mph
Average Speed for Segment, S	58.3	mph
Density across All Lanes, D	29.5	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	4,969	805	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,440	873	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,864	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,440	9,276	pcph	0.59
Exiting General Purpose Lanes	4,567	9,276	pcph	0.49
Off Ramp	873	2,100	pcph	0.42
Ramp Influence Area	2,864	4,400	pcph	0.65

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	27.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.377	
Average Speed in Ramp Influence Area, S_R	54.4	mph
Average Flow in Outer Lanes, v_{OA}	1,288	pcphpl
Average Speed in Outer Lanes, S_O	66.8	mph
Average Speed for Segment, S	59.6	mph
Density across All Lanes, D	22.8	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,164	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,140	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.49	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	18.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	3,934	960	230	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,265	1,041	249	0	pcph

Weaving Flow Rate, vW	1,290	Total Flow Rate, v	5,555
Non-Weaving Flow Rate, vNW	4,265	Volume Ratio, VR	0.232

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,868	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,018	pchpl
Demand Flow-Based Capacity, c_{IW}	10,033	pch
Weaving Segment Capacity, c_W	9,797	vph
Adjusted Weaving Area Capacity, c_{wa}	9,797	vph
Volume-to-Capacity Ratio, v/c	0.55	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,290	lc/h
Weaving Lane Change Rate, LC_W	1,361	lc/h
Non-weaving Vehicle Index, I_{NW}	399	
Non-weaving Lane Change Rate, LC_{NW}	423	lc/h
Total Lane Change Rate, LC_{ALL}	1,784	lc/h
Weaving Intensity Factor, W	0.376	
Average Weaving Speed, S_W	49.1	mph
Average Non-Weaving Speed, S_{NW}	47.3	mph
Average Speed, S	47.7	mph
Density, D	23.3	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,558	9,276	pcph	0.49
Exiting General Purpose Lanes	5,350	11,595	pcph	0.46
On Ramp	1,041	2,100	pcph	0.50
Off Ramp	249	2,100	pcph	0.12

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,894	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,339	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.58	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	21.6	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

Entering General Purpose Lanes - Demand and Capacity

Volume, V	4,894	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,339	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.58	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	21.6	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	59.9	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	31.2	pcphpl
Flow Rate, vp	1,872	pcphpl	Level of Service, LOS	D	
Volume-to-Capacity Ratio, v/c	0.81				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	4,894	1,964	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,358	2,129	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,358	9,276	pcph	0.58
Exiting General Purpose Lanes	7,487	9,276	pcph	0.81
On Ramp	2,129	2,100	pcph	**1.01**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,858	137	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	7,508	147	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,702	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,508	11,595	pcph	0.65
Exiting General Purpose Lanes	7,361	11,595	pcph	0.63
Off Ramp	147	2,100	pcph	0.07
Ramp Influence Area	2,702	4,400	pcph	0.61

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	26.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.311	
Average Speed in Ramp Influence Area, S_R	55.7	mph
Average Flow in Outer Lanes, v_{OA}	1,602	pcphpl
Average Speed in Outer Lanes, S_O	65.6	mph
Average Speed for Segment, S	61.6	mph
Density across All Lanes, D	24.0	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar		Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe		Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident		Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,721	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,472	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.63	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	23.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,721	241	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	8,283	261	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,759	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,283	9,276	pcph	0.89
Exiting General Purpose Lanes	8,022	11,595	pcph	0.69
Off Ramp	261	2,100	pcph	0.12
Ramp Influence Area	3,759	4,400	pcph	0.85

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	23.1	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.322	
Average Speed in Ramp Influence Area, S_R	55.5	mph
Average Flow in Outer Lanes, v_{OA}	2,262	pcphpl
Average Speed in Outer Lanes, S_O	63.0	mph
Average Speed for Segment, S	59.3	mph
Density across All Lanes, D	34.9	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,480	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	2,074	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	0.89	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	56.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	36.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	E	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,555	1,367	925	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,023	1,482	1,003	0	pcph

Weaving Flow Rate, vW	2,485	Total Flow Rate, v	8,508
Non-Weaving Flow Rate, vNW	6,023	Volume Ratio, VR	0.292

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,499	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,071	pchpl
Demand Flow-Based Capacity, c_{IW}	7,977	pch
Weaving Segment Capacity, c_W	7,977	vph
Adjusted Weaving Area Capacity, c_{wa}	7,977	vph
Volume-to-Capacity Ratio, v/c	**1.04**	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	2,485	lc/h
Weaving Lane Change Rate, LC_W	3,072	lc/h
Non-weaving Vehicle Index, I_{NW}	1,361	
Non-weaving Lane Change Rate, LC_{NW}	1,647	lc/h
Total Lane Change Rate, LC_{ALL}	4,719	lc/h
Weaving Intensity Factor, W	0.404	
Average Weaving Speed, S_W	48.4	mph
Average Non-Weaving Speed, S_{NW}	35.8	mph
Average Speed, S	38.8	mph
Density, D	-	pcpmpl
Level of Service, LOS	F	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,297	9,276	pcph	0.89
Exiting General Purpose Lanes	8,776	11,595	pcph	0.76
On Ramp	1,482	2,100	pcph	0.71
Off Ramp	1,003	2,100	pcph	0.48

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,998	1,259	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	9,850	1,365	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,065	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,850	9,276	pcph	**1.06**
Exiting General Purpose Lanes	8,485	9,276	pcph	0.91
Off Ramp	1,365	2,100	pcph	0.65
Ramp Influence Area	5,065	4,400	pcph	**1.15**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,739	1,759	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	8,472	1,907	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,769	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,472	9,276	pcph	0.91
Exiting General Purpose Lanes	6,565	9,276	pcph	0.71
Off Ramp	1,907	2,100	pcph	0.91
Ramp Influence Area	4,769	4,400	pcph	**1.08**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	45.3	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.470	
Average Speed in Ramp Influence Area, S_R	52.6	mph
Average Flow in Outer Lanes, v_{OA}	1,851	pcphpl
Average Speed in Outer Lanes, S_O	64.6	mph
Average Speed for Segment, S	57.2	mph
Density across All Lanes, D	37.0	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,980	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,637	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.71	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.7	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	26.5	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,244	178	736	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,686	193	798	0	pcph

Weaving Flow Rate, vW	991	Total Flow Rate, v	6,677
Non-Weaving Flow Rate, vNW	5,686	Volume Ratio, VR	0.148

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,016	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,060	pchpl
Demand Flow-Based Capacity, c_{IW}	15,699	pch
Weaving Segment Capacity, c_W	10,001	vph
Adjusted Weaving Area Capacity, c_{wa}	10,001	vph
Volume-to-Capacity Ratio, v/c	0.65	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	991	lc/h
Weaving Lane Change Rate, LC_W	944	lc/h
Non-weaving Vehicle Index, I_{NW}	360	
Non-weaving Lane Change Rate, LC_{NW}	551	lc/h
Total Lane Change Rate, LC_{ALL}	1,495	lc/h
Weaving Intensity Factor, W	0.445	
Average Weaving Speed, S_W	47.4	mph
Average Non-Weaving Speed, S_{NW}	48.4	mph
Average Speed, S	48.2	mph
Density, D	27.7	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,547	9,276	pcph	0.71
Exiting General Purpose Lanes	5,942	11,595	pcph	0.51
On Ramp	193	2,100	pcph	0.09
Off Ramp	798	2,100	pcph	0.38

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,422	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,484	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.64	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	24.0	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,713	339	709	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,110	368	769	0	pcph

Weaving Flow Rate, vW	1,136	Total Flow Rate, v	6,246
Non-Weaving Flow Rate, vNW	5,110	Volume Ratio, VR	0.182

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,352	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,061	pchpl
Demand Flow-Based Capacity, c_{IW}	12,809	pch
Weaving Segment Capacity, c_W	10,007	vph
Adjusted Weaving Area Capacity, c_{wa}	10,007	vph
Volume-to-Capacity Ratio, v/c	0.61	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,136	lc/h
Weaving Lane Change Rate, LC_W	1,227	lc/h
Non-weaving Vehicle Index, I_{NW}	504	
Non-weaving Lane Change Rate, LC_{NW}	624	lc/h
Total Lane Change Rate, LC_{ALL}	1,851	lc/h
Weaving Intensity Factor, W	0.371	
Average Weaving Speed, S_W	49.2	mph
Average Non-Weaving Speed, S_{NW}	47.7	mph
Average Speed, S	48.0	mph
Density, D	26.0	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,936	9,276	pcph	0.64
Exiting General Purpose Lanes	5,535	11,595	pcph	0.48
On Ramp	368	2,100	pcph	0.18
Off Ramp	769	2,100	pcph	0.37

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,052	914	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,531	991	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,970	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,531	9,276	pcph	0.60
Exiting General Purpose Lanes	4,540	9,276	pcph	0.49
Off Ramp	991	2,100	pcph	0.47
Ramp Influence Area	2,970	4,400	pcph	0.68

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	25.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.387	
Average Speed in Ramp Influence Area, S_R	54.2	mph
Average Flow in Outer Lanes, v_{OA}	1,280	pcphpl
Average Speed in Outer Lanes, S_O	66.8	mph
Average Speed for Segment, S	59.4	mph
Density across All Lanes, D	23.3	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,138	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,133	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.49	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	18.3	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	4,138	573	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,530	621	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2027 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.140	
Flow Rate in Lanes 1 and 2, v_{12}	1,812	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,530	9,276	pcph	0.49
Exiting General Purpose Lanes	5,151	9,276	pcph	0.56
On Ramp	621	2,100	pcph	0.30
Ramp Influence Area	2,433	4,600	pcph	0.53

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	22.4	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.338	
Average Speed in Ramp Influence Area, S_R	55.2	mph
Average Flow in Outer Lanes, v_{OA}	1,359	pcphpl
Average Speed in Outer Lanes, S_O	58.8	mph
Average Speed for Segment, S	57.0	mph
Density across All Lanes, D	22.6	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	9,064	1,970	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	9,923	2,136	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,531	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,923	9,276	pcph	**1.07**
Exiting General Purpose Lanes	7,787	9,276	pcph	0.84
Off Ramp	2,136	2,100	pcph	**1.02**
Ramp Influence Area	5,531	4,400	pcph	**1.26**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,094	688	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,766	746	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,807	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,766	9,276	pcph	0.84
Exiting General Purpose Lanes	7,020	9,276	pcph	0.76
Off Ramp	746	2,100	pcph	0.36
Ramp Influence Area	3,807	4,400	pcph	0.87

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	35.3	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.365	
Average Speed in Ramp Influence Area, S_R	54.6	mph
Average Flow in Outer Lanes, v_{OA}	1,980	pcphpl
Average Speed in Outer Lanes, S_O	64.1	mph
Average Speed for Segment, S	59.1	mph
Density across All Lanes, D	32.9	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,406	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,753	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.76	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.0	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	28.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	6,055	1,109	351	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,565	1,202	381	0	pcph

Weaving Flow Rate, vW	1,583	Total Flow Rate, v	8,148
Non-Weaving Flow Rate, vNW	6,565	Volume Ratio, VR	0.194

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,478	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,048	pchpl
Demand Flow-Based Capacity, c_{IW}	11,994	pch
Weaving Segment Capacity, c_W	9,942	vph
Adjusted Weaving Area Capacity, c_{wa}	9,942	vph
Volume-to-Capacity Ratio, v/c	0.80	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,583	lc/h
Weaving Lane Change Rate, LC_W	1,654	lc/h
Non-weaving Vehicle Index, I_{NW}	614	
Non-weaving Lane Change Rate, LC_{NW}	897	lc/h
Total Lane Change Rate, LC_{ALL}	2,551	lc/h
Weaving Intensity Factor, W	0.498	
Average Weaving Speed, S_W	46.3	mph
Average Non-Weaving Speed, S_{NW}	42.7	mph
Average Speed, S	43.3	mph
Density, D	37.6	pcpmpl
Level of Service, LOS	E	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,013	9,276	pcph	0.76
Exiting General Purpose Lanes	7,835	11,595	pcph	0.68
On Ramp	1,202	2,100	pcph	0.57
Off Ramp	381	2,100	pcph	0.18

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	7,164	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,961	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.85	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	58.8	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	33.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

Entering General Purpose Lanes - Demand and Capacity

Volume, V	7,164	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,961	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.85	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	58.8	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	33.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	-	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	-	pcphpl
Flow Rate, vp	2,366	pcphpl	Level of Service, LOS	F	
Volume-to-Capacity Ratio, v/c	1.02				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	7,164	1,495	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,843	1,621	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,843	9,276	pcph	0.85
Exiting General Purpose Lanes	9,464	9,276	pcph	**1.02**
On Ramp	1,621	2,100	pcph	0.77

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,659	355	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	9,479	381	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,521	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,479	11,595	pcph	0.82
Exiting General Purpose Lanes	9,098	11,595	pcph	0.78
Off Ramp	381	2,100	pcph	0.18
Ramp Influence Area	3,521	4,400	pcph	0.80

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	33.2	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.332	
Average Speed in Ramp Influence Area, S_R	55.3	mph
Average Flow in Outer Lanes, v_{OA}	1,986	pcphpl
Average Speed in Outer Lanes, S_O	64.1	mph
Average Speed for Segment, S	60.5	mph
Density across All Lanes, D	31.0	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

General Purpose Lanes - Demand and Capacity

Volume, V	8,304	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,818	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.78	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	60.5	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	30.1	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,304	640	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	10,234	694	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,853	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	10,234	9,276	pcph	**1.10**
Exiting General Purpose Lanes	9,540	11,595	pcph	0.82
Off Ramp	694	2,100	pcph	0.33
Ramp Influence Area	4,853	4,400	pcph	**1.10**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	7,664	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	2,453	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	1.06	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	-	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	-	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	F	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	6,168	918	1,496	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,687	995	1,622	0	pcph

Weaving Flow Rate, vW	2,617	Total Flow Rate, v	9,305
Non-Weaving Flow Rate, vNW	6,687	Volume Ratio, VR	0.281

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,384	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,080	pchpl
Demand Flow-Based Capacity, c_{IW}	8,284	pch
Weaving Segment Capacity, c_W	8,284	vph
Adjusted Weaving Area Capacity, c_{wa}	8,284	vph
Volume-to-Capacity Ratio, v/c	**1.09**	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	2,617	lc/h
Weaving Lane Change Rate, LC_W	3,205	lc/h
Non-weaving Vehicle Index, I_{NW}	1,511	
Non-weaving Lane Change Rate, LC_{NW}	2,141	lc/h
Total Lane Change Rate, LC_{ALL}	5,345	lc/h
Weaving Intensity Factor, W	0.446	
Average Weaving Speed, S_W	47.4	mph
Average Non-Weaving Speed, S_{NW}	34.1	mph
Average Speed, S	37.0	mph
Density, D	-	pcpmpl
Level of Service, LOS	F	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,813	9,276	pcph	**1.06**
Exiting General Purpose Lanes	9,186	11,595	pcph	0.79
On Ramp	995	2,100	pcph	0.47
Off Ramp	1,622	2,100	pcph	0.77

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	9,858	1,595	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	10,792	1,729	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,681	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	10,792	9,276	pcph	**1.16**
Exiting General Purpose Lanes	9,063	9,276	pcph	0.98
Off Ramp	1,729	2,100	pcph	0.82
Ramp Influence Area	5,681	4,400	pcph	**1.29**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,263	2,139	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	9,046	2,319	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,252	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	9,046	9,276	pcph	0.98
Exiting General Purpose Lanes	6,727	9,276	pcph	0.73
Off Ramp	2,319	2,100	pcph	**1.10**
Ramp Influence Area	5,252	4,400	pcph	**1.19**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,124	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,676	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.72	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.5	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	27.2	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,370	206	754	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,822	223	817	0	pcph

Weaving Flow Rate, vW	1,041	Total Flow Rate, v	6,863
Non-Weaving Flow Rate, vNW	5,822	Volume Ratio, VR	0.152

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,048	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,058	pchpl
Demand Flow-Based Capacity, c_{IW}	15,364	pch
Weaving Segment Capacity, c_W	9,989	vph
Adjusted Weaving Area Capacity, c_{wa}	9,989	vph
Volume-to-Capacity Ratio, v/c	0.67	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,041	lc/h
Weaving Lane Change Rate, LC_W	994	lc/h
Non-weaving Vehicle Index, I_{NW}	369	
Non-weaving Lane Change Rate, LC_{NW}	579	lc/h
Total Lane Change Rate, LC_{ALL}	1,573	lc/h
Weaving Intensity Factor, W	0.464	
Average Weaving Speed, S_W	47.0	mph
Average Non-Weaving Speed, S_{NW}	47.8	mph
Average Speed, S	47.7	mph
Density, D	28.8	pcpmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,704	9,276	pcph	0.72
Exiting General Purpose Lanes	6,110	11,595	pcph	0.53
On Ramp	223	2,100	pcph	0.11
Off Ramp	817	2,100	pcph	0.39

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,576	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,526	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.66	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	24.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,887	287	689	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,299	311	747	0	pcph

Weaving Flow Rate, vW	1,058	Total Flow Rate, v	6,357
Non-Weaving Flow Rate, vNW	5,299	Volume Ratio, VR	0.166

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	AM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,196	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,073	pchpl
Demand Flow-Based Capacity, c_{IW}	13,997	pch
Weaving Segment Capacity, c_W	10,065	vph
Adjusted Weaving Area Capacity, c_{wa}	10,065	vph
Volume-to-Capacity Ratio, v/c	0.61	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,058	lc/h
Weaving Lane Change Rate, LC_W	1,149	lc/h
Non-weaving Vehicle Index, I_{NW}	522	
Non-weaving Lane Change Rate, LC_{NW}	663	lc/h
Total Lane Change Rate, LC_{ALL}	1,812	lc/h
Weaving Intensity Factor, W	0.365	
Average Weaving Speed, S_W	49.4	mph
Average Non-Weaving Speed, S_{NW}	48.2	mph
Average Speed, S	48.4	mph
Density, D	26.3	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,104	9,276	pcph	0.66
Exiting General Purpose Lanes	5,668	11,595	pcph	0.49
On Ramp	311	2,100	pcph	0.15
Off Ramp	747	2,100	pcph	0.36

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,174	1,006	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,664	1,091	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,085	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,664	9,276	pcph	0.61
Exiting General Purpose Lanes	4,573	9,276	pcph	0.49
Off Ramp	1,091	2,100	pcph	0.52
Ramp Influence Area	3,085	4,400	pcph	0.70

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	26.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.396	
Average Speed in Ramp Influence Area, S_R	54.0	mph
Average Flow in Outer Lanes, v_{OA}	1,290	pcphpl
Average Speed in Outer Lanes, S_O	66.8	mph
Average Speed for Segment, S	59.2	mph
Density across All Lanes, D	23.9	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,168	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,141	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.49	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	18.4	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	4,168	493	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,563	535	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	AM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.151	
Flow Rate in Lanes 1 and 2, v_{12}	1,825	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,563	9,276	pcph	0.49
Exiting General Purpose Lanes	5,097	9,276	pcph	0.55
On Ramp	535	2,100	pcph	0.25
Ramp Influence Area	2,360	4,600	pcph	0.51

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	21.8	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.335	
Average Speed in Ramp Influence Area, S_R	55.2	mph
Average Flow in Outer Lanes, v_{OA}	1,369	pcphpl
Average Speed in Outer Lanes, S_O	58.8	mph
Average Speed for Segment, S	57.1	mph
Density across All Lanes, D	22.3	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,236	163	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	6,530	1,340	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	7,149	1,453	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Sunset Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,936	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,149	9,276	pcph	0.77
Exiting General Purpose Lanes	5,696	9,276	pcph	0.61
Off Ramp	1,453	2,100	pcph	0.69
Ramp Influence Area	3,936	4,400	pcph	0.89

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	36.6	pcpmpl
Level of Service, LOS	E	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.429	
Average Speed in Ramp Influence Area, S_R	53.4	mph
Average Flow in Outer Lanes, v_{OA}	1,606	pcphpl
Average Speed in Outer Lanes, S_O	65.5	mph
Average Speed for Segment, S	58.2	mph
Density across All Lanes, D	30.7	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	442	190	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,190	827	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,682	897	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,983	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,682	9,276	pcph	0.61
Exiting General Purpose Lanes	4,785	9,276	pcph	0.52
Off Ramp	897	2,100	pcph	0.43
Ramp Influence Area	2,983	4,400	pcph	0.68

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	28.2	pcpmpl
Level of Service, LOS	D	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.379	
Average Speed in Ramp Influence Area, S_R	54.4	mph
Average Flow in Outer Lanes, v_{OA}	1,349	pcphpl
Average Speed in Outer Lanes, S_O	66.5	mph
Average Speed for Segment, S	59.5	mph
Density across All Lanes, D	23.9	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd Off to On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,139	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,363	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,194	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.51	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	19.3	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	936	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,126	1,000	237	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	4,473	1,084	257	0	pcph

Weaving Flow Rate, vW	1,341	Total Flow Rate, v	5,815
Non-Weaving Flow Rate, vNW	4,473	Volume Ratio, VR	0.231

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Hollywood Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,852	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,019	pchpl
Demand Flow-Based Capacity, c_{IW}	10,102	pch
Weaving Segment Capacity, c_W	9,803	vph
Adjusted Weaving Area Capacity, c_{wa}	9,803	vph
Volume-to-Capacity Ratio, v/c	0.58	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,341	lc/h
Weaving Lane Change Rate, LC_W	1,412	lc/h
Non-weaving Vehicle Index, I_{NW}	419	
Non-weaving Lane Change Rate, LC_{NW}	466	lc/h
Total Lane Change Rate, LC_{ALL}	1,878	lc/h
Weaving Intensity Factor, W	0.391	
Average Weaving Speed, S_W	48.7	mph
Average Non-Weaving Speed, S_{NW}	46.7	mph
Average Speed, S	47.1	mph
Density, D	24.7	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,776	9,276	pcph	0.51
Exiting General Purpose Lanes	5,604	11,595	pcph	0.48
On Ramp	1,084	2,100	pcph	0.52
Off Ramp	257	2,100	pcph	0.12

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Gower St Off to to Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,954	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,126	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,403	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.60	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	22.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Entering General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	233	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

Entering General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

Entering General Purpose Lanes - Demand and Capacity

Volume, V	5,126	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,403	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.60	

Entering General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	22.7	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Segment General Purpose Lanes - Capacity, Speed, and Density

General Purpose Lanes, N	4	ln	Average Speed, S	58.9	mph
Adjusted Capacity, cadj	2,319	pcphpl	Density, D	33.2	pcphpl
Flow Rate, vp	1,954	pcphpl	Level of Service, LOS	D	
Volume-to-Capacity Ratio, v/c	0.84				

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	233	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	5,126	2,035	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,612	2,206	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}		
Flow Rate in Lanes 1 and 2, v_{12}		pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,612	9,276	pcph	0.60
Exiting General Purpose Lanes	7,818	9,276	pcph	0.84
On Ramp	2,206	2,100	pcph	**1.05**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R		pcpmpl
Level of Service, LOS		

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF		
Speed Index, M_S or D_S		
Average Speed in Ramp Influence Area, S_R		mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D		pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	5	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	233	144	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp	
Driver Population	Familiar	Familiar	
Weather Type	Non-severe	Non-severe	
Incident Type	No incident	No incident	
Capacity Adjustment Factor, CAF	1.00	1.00	
Demand Adjustment Factor, DAF	1.00	1.00	

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,161	141	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	2.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.980	
Flow Rate, v_p	7,839	151	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	2,820	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	7,839	11,595	pcph	0.68
Exiting General Purpose Lanes	7,688	11,595	pcph	0.66
Off Ramp	151	2,100	pcph	0.07
Ramp Influence Area	2,820	4,400	pcph	0.64

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	27.2	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.312	
Average Speed in Ramp Influence Area, S_R	55.7	mph
Average Flow in Outer Lanes, v_{OA}	1,673	pcphpl
Average Speed in Outer Lanes, S_O	65.3	mph
Average Speed for Segment, S	61.5	mph
Density across All Lanes, D	25.1	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Cahuenga Blvd to Highland Ave
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	5	ln	Terrain Type	Level	
Segment Length, L	380	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00	
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00	
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00	

General Purpose Lanes - Demand and Capacity

Volume, V	7,020	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,537	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.66	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	24.8	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,500	1,500	ft
Terrain Type	Grade	Level	
Percent Grade	0	-	
Grade Length	1	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	7,020	254	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	70%/30%	-	
Passenger Car Equivalent, E_T	5.3	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.854	0.971	
Flow Rate, v_p	8,652	275	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,927	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,652	9,276	pcph	0.93
Exiting General Purpose Lanes	8,376	11,595	pcph	0.72
Off Ramp	275	2,100	pcph	0.13
Ramp Influence Area	3,927	4,400	pcph	0.89

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	24.5	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.323	
Average Speed in Ramp Influence Area, S_R	55.5	mph
Average Flow in Outer Lanes, v_{OA}	2,362	pcphpl
Average Speed in Outer Lanes, S_O	62.6	mph
Average Speed for Segment, S	59.1	mph
Density across All Lanes, D	36.6	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Highland Ave to Pilgrimage Bridge
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Grade	
Segment Length, L	2,200	ft	Percent Grade	5%	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	1.0	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,766	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.822	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	2,166	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	70%/30%		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	6.4		Volume-to-Capacity Ratio, v/c	0.93	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	55.1	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	39.3	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	E	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	2,260	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,804	1,416	962	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	6,293	1,535	1,043	0	pcph

Weaving Flow Rate, vW	2,578	Total Flow Rate, v	8,871
Non-Weaving Flow Rate, vNW	6,293	Volume Ratio, VR	0.291

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Northbound US-101
Segment	Pilgrimage Bridge to Barham Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	5,484	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,072	pchpl
Demand Flow-Based Capacity, c_{IW}	8,017	pch
Weaving Segment Capacity, c_W	8,017	vph
Adjusted Weaving Area Capacity, c_{wa}	8,017	vph
Volume-to-Capacity Ratio, v/c	**1.07**	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	2,578	lc/h
Weaving Lane Change Rate, LC_W	3,166	lc/h
Non-weaving Vehicle Index, I_{NW}	1,422	
Non-weaving Lane Change Rate, LC_{NW}	1,847	lc/h
Total Lane Change Rate, LC_{ALL}	5,012	lc/h
Weaving Intensity Factor, W	0.424	
Average Weaving Speed, S_W	47.9	mph
Average Non-Weaving Speed, S_{NW}	34.8	mph
Average Speed, S	37.8	mph
Density, D	-	pcpmpl
Level of Service, LOS	F	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,663	9,276	pcph	0.93
Exiting General Purpose Lanes	9,156	11,595	pcph	0.79
On Ramp	1,535	2,100	pcph	0.73
Off Ramp	1,043	2,100	pcph	0.50

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	472	140	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	9,386	1,309	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	10,275	1,419	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp	0		
Distance to Adjacent Ramp	0		ft
Volume on Adjacent Ramp	0		pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	5,280	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	10,275	9,276	pcph	**1.11**
Exiting General Purpose Lanes	8,856	9,276	pcph	0.95
Off Ramp	1,419	2,100	pcph	0.68
Ramp Influence Area	5,280	4,400	pcph	**1.20**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	-	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	-	
Average Speed in Ramp Influence Area, S_R	-	mph
Average Flow in Outer Lanes, v_{OA}		pcphpl
Average Speed in Outer Lanes, S_O		mph
Average Speed for Segment, S		mph
Density across All Lanes, D	-	pcpmpl

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	1,090	0	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	8,077	1,834	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	8,842	1,988	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	4,977	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	8,842	9,276	pcph	0.95
Exiting General Purpose Lanes	6,854	9,276	pcph	0.74
Off Ramp	1,988	2,100	pcph	0.95
Ramp Influence Area	4,977	4,400	pcph	**1.13**

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	47.1	pcpmpl
Level of Service, LOS	F	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.477	
Average Speed in Ramp Influence Area, S_R	52.4	mph
Average Flow in Outer Lanes, v_{OA}	1,933	pcphpl
Average Speed in Outer Lanes, S_O	64.3	mph
Average Speed for Segment, S	57.0	mph
Density across All Lanes, D	38.8	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Vine St Off to Cahuenga Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	6,243	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,709	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.74	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.3	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	27.9	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	D	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	633	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	5,481	185	762	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,943	201	826	0	pcph

Weaving Flow Rate, vW	1,027	Total Flow Rate, v	6,969
Non-Weaving Flow Rate, vNW	5,943	Volume Ratio, VR	0.147

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Cahuenga Blvd to Gower St
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,005	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,061	pchpl
Demand Flow-Based Capacity, c_{IW}	15,816	pch
Weaving Segment Capacity, c_W	10,005	vph
Adjusted Weaving Area Capacity, c_{wa}	10,005	vph
Volume-to-Capacity Ratio, v/c	0.68	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,027	lc/h
Weaving Lane Change Rate, LC_W	980	lc/h
Non-weaving Vehicle Index, I_{NW}	376	
Non-weaving Lane Change Rate, LC_{NW}	604	lc/h
Total Lane Change Rate, LC_{ALL}	1,584	lc/h
Weaving Intensity Factor, W	0.466	
Average Weaving Speed, S_W	47.0	mph
Average Non-Weaving Speed, S_{NW}	47.8	mph
Average Speed, S	47.7	mph
Density, D	29.2	pcpmpl
Level of Service, LOS	D	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,834	9,276	pcph	0.74
Exiting General Purpose Lanes	6,209	11,595	pcph	0.54
On Ramp	201	2,100	pcph	0.10
Off Ramp	826	2,100	pcph	0.39

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Gower St Off to Argyle Ave On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	559	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	5,666	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,551	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.67	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	25.1	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

HCM 6th Edition: Freeway Weaving Segment

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Geometric Data

Segment Type	Freeway	
Weaving Configuration	One-sided	
Number of Lanes, N	5	ln
Weaving Segment Length, L_S	986	ft
Interchange Density, ID	1.0	int/mi
Number of Manuever Lanes, N_{WL}	2.0	ln
On Ramp to Freeway Lane Changes, LC_{RF}	1	
Freeway to Off Ramp Lane Changes, LC_{FR}	1	
On Ramp to Off Ramp Lane Changes, LC_{RR}	0	

Adjustment Factors

Driver Population	Familiar
Weather Type	Non-severe
Incident Type	No incident
Capacity Adjustment Factor, CAF	
Demand Adjustment Factor, DAF	

Volume Data

	Frwy to Frwy	On to Frwy	Frwy to Off	Frwy to Off	
Volume, V	4,924	350	742	0	vph
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	
Total Trucks	3.0%	3.0%	3.0%	3.0%	
Terrain Type	Level	Level	Level	Level	
Grade					
Length					mi
SUT/TT Mix					
Passenger Car Equivalent, E_T	2.0	2.0	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.971	0.971	0.971	0.971	
Demand Adjustment Factor, DAF	1.00	1.00	1.00	1.00	
Flow Rate, v_p	5,339	379	804	0	pcph

Weaving Flow Rate, vW	1,184	Total Flow Rate, v	6,523
Non-Weaving Flow Rate, vNW	5,339	Volume Ratio, VR	0.182

Freeway Weave Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Argyle Ave to Hollywood Blvd
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time period	PM Peak Hour

Capacity

Maximum Weaving Length, L_{MAX}	4,348	ft
Weaving Length Check	OK	
Freeway Maximum Capacity, c_{IFL}	2,319	pchpl
Density-Based Capacity, c_{IWL}	2,062	pchpl
Demand Flow-Based Capacity, c_{IW}	12,837	pch
Weaving Segment Capacity, c_W	10,009	vph
Adjusted Weaving Area Capacity, c_{wa}	10,009	vph
Volume-to-Capacity Ratio, v/c	0.63	

Speed and Density

Minimum Lane Change Rate, LC_{MIN}	1,184	lc/h
Weaving Lane Change Rate, LC_W	1,274	lc/h
Non-weaving Vehicle Index, I_{NW}	526	
Non-weaving Lane Change Rate, LC_{NW}	671	lc/h
Total Lane Change Rate, LC_{ALL}	1,946	lc/h
Weaving Intensity Factor, W	0.386	
Average Weaving Speed, S_W	48.8	mph
Average Non-Weaving Speed, S_{NW}	47.1	mph
Average Speed, S	47.4	mph
Density, D	27.5	pcpmpl
Level of Service, LOS	C	

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	6,203	9,276	pcph	0.67
Exiting General Purpose Lanes	5,778	11,595	pcph	0.50
On Ramp	379	2,100	pcph	0.18
Off Ramp	804	2,100	pcph	0.38

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	Off Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Deceleration Length, LD	506	506	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	Off Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	Off Ramp	
Volume, V	5,274	952	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	5,774	1,032	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Diverge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.436	
Flow Rate in Lanes 1 and 2, v_{12}	3,099	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	5,774	9,276	pcph	0.62
Exiting General Purpose Lanes	4,741	9,276	pcph	0.51
Off Ramp	1,032	2,100	pcph	0.49
Ramp Influence Area	3,099	4,400	pcph	0.70

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	26.4	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.391	
Average Speed in Ramp Influence Area, S_R	54.1	mph
Average Flow in Outer Lanes, v_{OA}	1,337	pcphpl
Average Speed in Outer Lanes, S_O	66.6	mph
Average Speed for Segment, S	59.3	mph
Density across All Lanes, D	24.4	pcpmpl

Freeway Basic Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Van Ness Ave Off to Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

General Purpose Lanes - Geometric Data

General Purpose Lanes, N	4	ln	Terrain Type	Level	
Segment Length, L	1,059	ft	Percent Grade	-	
Base Free Flow Speed, BFFS	70.0	mph	Grade Length	-	mi
Lane Width	12.0	ft	Total Ramp Density, TRD	3.00	ramps/mi
Right Side Lateral Clearance	6.0	ft	Free Flow Speed, FFS	61.9	mph

General Purpose Lanes - Adjustment Factors

Driver Population	Familiar	Speed Adjustment Factor, SAF	1.00
Weather Type	Non-severe	Capacity Adjustment Factor, CAF	1.00
Incident Type	No incident	Demand Adjustment Factor, DAF	1.00

General Purpose Lanes - Demand and Capacity

Volume, V	4,322	vph	Heavy Vehicle Adjustment Factor, f_{HV}	0.962	
Peak Hour Factor, PHF	0.95		Flow Rate, v_p	1,183	pcphpl
Total Trucks	4.0%		Capacity, c	2,319	pcphpl
Single Unit/Tractor-Trailer Mix	-		Adjusted Capacity, c_{adj}	2,319	pcphpl
Passenger Car Equivalent, E_T	2.0		Volume-to-Capacity Ratio, v/c	0.51	

General Purpose Lanes - Speed and Density

Measured or Base FFS	Base		Adjusted Free Flow Speed, FFS_{adj}	61.9	mph
Lane Width Adjustment, f_{LW}	0.0	mph	Average Speed, S	61.9	mph
Right Lateral Clearance Adjustment, f_{RLC}	0.0	mph	Density, D	19.1	pcpmpl
Total Ramp Density Adjustment	8.1	mph	Level of Service, LOS	C	

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Geometric Data

	Freeway	On Ramp	
Number of Lanes, N	4	1	
Free-Flow Speed, FFS	61.9	45	mph
Segment Length, L / Acceleration Length, LA	1,500	300	ft
Terrain Type	Level	Level	
Percent Grade	-	-	
Grade Length	-	-	ft
Segment Type / Ramp Type	Freeway	Right	

Adjustment Factors

	Freeway	On Ramp
Driver Population	Familiar	Familiar
Weather Type	Non-severe	Non-severe
Incident Type	No incident	No incident
Capacity Adjustment Factor, CAF	1.00	1.00
Demand Adjustment Factor, DAF	1.00	1.00

Volume Data

Junction Components	Freeway	On Ramp	
Volume, V	4,322	585	vph
Peak Hour Factor, PHF	0.95	0.95	
Total Trucks	4.0%	3.0%	
Single Unit/Tractor-Trailer Mix	-	-	
Passenger Car Equivalent, E_T	2.0	2.0	
Heavy Vehicle Adjustment, f_{HV}	0.962	0.971	
Flow Rate, v_p	4,731	634	pcph

Adjacent Ramp Data

	Upstream	Downstream	
Adjacent Ramp Meeting Criteria	No	No	
Type of Adjacent Ramp			
Distance to Adjacent Ramp			ft
Volume on Adjacent Ramp			pcph

Freeway Merge Report

Project	Hollywood Center
Freeway	Southbound US-101
Segment	Hollywood Blvd On
Alternative	Cumulative Plus Project - 2040 (Alt 8)
Time Period	PM Peak Hour

Estimation of Volume in Ramp Influence Area

Adjacent Upstream On-ramp Equilibrium Distance, L_{EQ}		ft
Adjacent Downstream On-ramp Equilibrium Distance, L_{EQ}		ft
Proportion of Freeway Vehicles in Lanes 1 and 2, P_{FM} or P_{FD}	0.139	
Flow Rate in Lanes 1 and 2, v_{12}	1,893	pcph

Capacity Checks

	Flow	Capacity		V/C Ratio
Entering General Purpose Lanes	4,731	9,276	pcph	0.51
Exiting General Purpose Lanes	5,366	9,276	pcph	0.58
On Ramp	634	2,100	pcph	0.30
Ramp Influence Area	2,527	4,600	pcph	0.55

Ramp Influence Area Density and Level of Service

Density in Ramp Influence Area, D_R	23.1	pcpmpl
Level of Service, LOS	C	

Segment Speed, Flow, and Density

Speed Adjustment Factor, SAF	1.00	
Speed Index, M_S or D_S	0.343	
Average Speed in Ramp Influence Area, S_R	55.1	mph
Average Flow in Outer Lanes, v_{OA}	1,419	pcphpl
Average Speed in Outer Lanes, S_O	58.6	mph
Average Speed for Segment, S	56.9	mph
Density across All Lanes, D	23.6	pcpmpl