APPENDIX B

Traffic Study (2017)

Addendum (2023) to Traffic Study (W/current project description)

CPC-2018-1511-ZC-ZV-ZAA-CU-CUB-SPR
ENV-2018-1512-ND
Site Address: 3216 W. Street
Mixed Use- (Apartment/Hotel) Project

MEMORANDUM

TO: Wes Pringle, Los Angeles Department of Transportation

FROM: Jonathan Chambers, P.E.

DATE: September 29, 2023

RE: Updated Transportation Analysis for the
3216 W. 8th Street Mixed-Use Project
Los Angeles, California **Ref:** J1570

Gibson Transportation Consulting, Inc. (GTC) was asked by EWAI, LLC to prepare updated transportation analyses for the revised 3216 W. 8th Street mixed-use development (Project) in the Koreatown neighborhood of the City of Los Angeles (City). The analyses herein were conducted for the Project in accordance with the Los Angeles Department of Transportation (LADOT) Transportation Assessment Guidelines (LADOT, August 2022) (TAG)

PROJECT BACKGROUND

The Project has undergone several iterations and several reviews by LADOT.

Original Project

The Original Project, analyzed in year 2017, consisted of 80 hotel rooms, eight condominium units, and 7,273 square feet (sf) of commercial space (assumed to be a combination of retail space and a karaoke bar). Access was to be provided on 8th Street and Mariposa Avenue. A transportation impact study (Original Project TIS) was prepared for the Original Project based on level of service (LOS) methodology (*Transportation Impact Study for the 3216 W. 8th Street Mixed-Use Project*, GTC, October 2017) and was approved by LADOT (DOT Case No. CEN 17-46564). The Original Project TIS evaluated nine signalized intersections and found no significant impacts.

First Revised Project

The First Revised Project, analyzed in year 2021, consisted of 95 hotel rooms and 4,716 sf of ground-floor commercial space (assumed to be restaurant) over three levels of subterranean parking. Access was unchanged from the Original Project. The analysis of the First Revised Project was subject to revisions to the California Environmental Quality Act (CEQA) under Senate Bill 743 (SB 743), including an analysis of potential Project impacts based on vehicle miles traveled (VMT). *CEQA Thresholds Analysis for the 3216 W. 8th Street Mixed-Use Project*

(GTC, October 2021) (First Revised Project CEQA Memo) concluded that the Project would not result in any significant impacts under any of the four CEQA thresholds in the TAG, including VMT after mitigation. Additionally, though the First Revised Project was found to generate more trips than the Original Project, updates to the LOS analysis from the Original Project TIS confirmed that no significant impacts would occur under the LOS methodology.

Current Project

The Current Project represents a second revision to the Project. It consists of 60 hotel rooms, 20 residential units (including four affordable units), and approximately 3,950 sf of ground-floor restaurant space. The hotel would be in seven levels on the north side of the Project Site with a lobby fronting 8th Street. The apartment units would be in six levels on the south side of the Project Site with a lobby fronting Mariposa Avenue. The restaurant would be in the northwest corner of the Project Site with outdoor seating along both street frontages. In total the Current Project would provide up to 97 parking spaces[1] with the same access pattern as the Original Project (i.e., a full-access driveway on Mariposa Avenue and an inbound-only driveway on 8th Street).

The Current Project site plan is shown in Figure 1.

TRANSPORTATION ANALYSIS REQUIREMENTS

The Original Project TIS evaluated the Original Project based on LOS operations at intersections, consistent with City and State of California requirements at that time. The First Revised Project CEQA Memo confirmed that the First Revised Project would not result in new intersection impacts and confirmed that it would not result in any transportation impacts (after VMT mitigation) under the new CEQA thresholds in the TAG.

This analysis updated the trip generation estimates for the Current Project to compare to the past Project iterations and updated the analysis under each CEQA threshold in the TAG. The TAG identifies four types of CEQA analyses that are applicable to the Project for identifying potential significant transportation impacts in accordance with SB 743:

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial Vehicle Miles Traveled (VMT)
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
- Freeway Safety Analysis

Each analysis is detailed below.

[1] In accordance with California Assembly Bill 2097, parking minimums only apply to the Project's hotel use (45 spaces). However, the Project may provide up to 97 parking spaces, which is less than the Los Angeles Municipal Code requirement of 124 spaces.

CURRENT PROJECT TRIP GENERATION

Trip generation estimates for the Current Project were prepared using the City's VMT Calculator tool for daily trip generation and rates from *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) for the peak hour estimates. Trip generation credits for transit usage, pass-by trips, and internal capture are consistent from the Original Project TIS. Table 1 summarizes the trip generation estimates for the Current Project as well as the prior estimates for the Original Project and the First Revised Project for comparison.

As shown in Table 1, the Current Project would generate 546 daily trips, 56 trips during the morning peak hour, and 61 trips during the afternoon peak hour. This is substantially fewer daily and afternoon peak hour trips than either the Original Project or the First Revised Project. It is also substantially fewer morning peak hour trips than the First Revised Project, but slightly more morning peak hour trips than the Original Project. Because it would generate fewer trips than the First Revised Project on both a daily and peak hour basis, and the First Revised Project CEQA Memo showed that the Project would not exceed LADOT's former LOS thresholds for a significant impact, the Current Project would similarly not exceed those thresholds, and no significant impact would be identified using LOS methodologies.

THRESHOLD T-1: CONFLICTING WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES

Threshold T-1 states that a project would result in a significant impact if it conflicts with a program, plan, ordinance, or policy adopted to protect the environment and that addresses the circulation system, including transit, roadways, bicycle, and pedestrian facilities. Table 2.1-1 of the TAG provides the City plans, policies, programs, ordinances, and standards relevant in determining project consistency. Attachment D of the TAG – *Plans, Policies, and Programs Consistency Worksheet* – provides a structured approach to evaluate whether a project conflicts with the City plans, programs, ordinances, or policies and streamlines the review by highlighting the most relevant plans, policies, and programs when assessing potential impacts to the City's transportation system. The *Plans, Policies, and Programs Consistency Worksheet* was completed for the Current Project and is provided in Attachment A.

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

Mobility Plan

Mobility Plan 2035, An Element of the General Plan (Los Angeles Department of City Planning [LADCP], September 2016) (Mobility Plan) combines "complete street" principles with the following five goals that define the City's mobility priorities:

- Safety First
- World Class Infrastructure

- Access for all Angelenos
- Collaboration, Communication, and Informed Choices
- Clean Environments and Healthy Communities

The Project Site access is consistent with the goals of the Mobility Plan as the Current Project would be designed to provide safe access for all users. Primary vehicular access is provided on Mariposa Avenue, along with a valet area driveway to W. 8th Street. Separate pedestrian access would be provided to the restaurant on Mariposa Avenue and to the hotel lobby on W. 8th Street. The Current Project would dedicate approximately three feet along W. 8th Street to the City and construct a widened sidewalk consistent with Mobility Plan requirements. These access features specifically support Policies 1.1 (Roadway User Vulnerability), 2.3 (Pedestrian Infrastructure), and 3.1 (Access for All). The Current Project's provision of commercial uses on a major corridor (W. 8th Street) and near a major transit stop (the Wilshire/Normandie station of the Los Angeles County Metropolitan Transportation Authority [Metro] D subway line) would reduce trips and travel distances in support of Policy 3.3 (Land Use Access and Mix) as it would increase jobs and local commercial uses in proximity to housing. Similarly, by being located near high-quality transit and providing bicycle parking, it would support Policies 3.4 (Transit Services), 3.5 (Multi-Modal Features), 3.7 (Regional Transit Connections), and 3.8 (Bicycle Parking). The Current Project's provision of bicycle parking help to encourage alternative travel modes, supporting Policies 4.8 (Transportation Demand Management Strategies) and 5.2 (Vehicle Miles Traveled).

The Current Project would help to further various goals of the Mobility Plan and would not preclude implementation of Mobility Plan policies. Thus, the Current Project would not conflict with the Mobility Plan.

Plan for a Healthy Los Angeles

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

The Current Project supports healthy lifestyles by reducing single-occupant vehicle trips by virtue of its location near high-quality and high-frequency transit options. Additionally, the Current Project would provide on-site bicycle parking to encourage bicycling and walking for residents and visitors to the Project Site. The Current Project does not conflict with any other policies recommended by the plan. Therefore, the Current Project is consistent with Plan for a Healthy Los Angeles.

Land Use Element of the General Plan

The City's General Plan Land Use Element contains 35 Community Plans that establish specific goals and strategies for the various neighborhoods across Los Angeles. The Project Site falls within the Wilshire Community Plan area boundaries. The Current Project is consistent with the Wilshire Community Plan because it constructs commercial and residential uses in an area zoned for commercial and high-density residential development in close proximity to high-frequency transit. It also is consistent with site planning standards by activating ground-floor commercial

space. The Current Project would be consistent with the objectives of the Wilshire Community Plan by furthering the development of the Wilshire community as a safe, secure, and high-quality residential and commercial environment.

Specific Plans

The Project Site is not located within a Specific Plan area and, therefore, the Current Project is not in conflict.

Streetscape Plans

There are no streetscape plans in the vicinity of the Project Site and, therefore, the Current Project is not in conflict.

Los Angeles Municipal Code (LAMC) Section 12.21.A.16

LAMC Section 12.21.A.16 details the bicycle parking requirements for new developments. The Current Project would provide 42 bicycle parking spaces, including 30 long-term and 12 short-term bicycle parking spaces, which exceeds the LAMC requirements (29 long-term and 11 short-term spaces).

LAMC Section 12.26.J

LAMC Section 12.26.J, the Transportation Demand Management (TDM) Ordinance (1993), establishes TDM requirements for projects with at least 25,000 sf of non-residential gross floor area. The Current Project proposes more than 25,000 sf of non-residential floor area and, therefore, is required by the TDM Ordinance to provide a transportation information display board for employees showing information about public transit, rideshare opportunities, and nearby bicycle routes. The Project would comply with this requirement.

Vision Zero Action Plan / Vision Zero Corridor Plans

The primary goal of the City's *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (August 2015) (Vision Zero) is to eliminate traffic deaths in the City by 2025. Vision Zero identifies the High Injury Network, a network of streets where strategic investments will have the biggest impact in reducing death and severe injury. Based on data from www.ladotlivablestreets.org, Vision Zero Safety Improvements Projects are planned in the vicinity, including continental crosswalks on James M. Wood Boulevard at each block between Irolo Street and Kenmore Avenue, accessible pedestrian signals at on W. 8th Street at Normandie Avenue and Mariposa Avenue, and pedestrian curb ramps on James M. Wood Boulevard at Fedora Avenue. There is no current schedule for implementation of these improvements. The Current Project would not preclude installation of these or any future Vision Zero safety improvements on surrounding streets. Thus, the Current Project does not conflict with Vision Zero.

Citywide Design Guidelines

Citywide Design Guidelines (Los Angeles City Planning Urban Design Studio, October 2019) identifies urban design principles to guide architects and developers in designing high-quality projects that meet the City's functional, aesthetic, and policy objectives and help foster a sense of community. The design guidelines are organized around three design approaches: Pedestrian-First Design, 360-Degree Design, and Climate-Adapted Design.

As discussed previously, the Current Project would encourage pedestrian activity by developing residential and commercial uses, including ground-floor restaurant, in close proximity to high-quality transit and by providing direct pedestrian access to the adjacent sidewalks on W. 8th Street and Mariposa Avenue. It would maintain the existing compliant sidewalk width on Mariposa Avenue and would widen the sidewalk on W. 8th Street to 15 feet, consistent with Mobility Plan requirements, through the dedication of approximately three feet of the north side of the Project Site. Therefore, the Current Project would align with *Citywide Design Guidelines* to provide a safe, comfortable, and accessible experience for all transportation modes.

Cumulative Analysis

In addition to potential Project-specific impacts, the TAG requires that the Current Project be reviewed in combination with nearby Related Projects to determine if there may be a cumulatively significant impact resulting from inconsistency with a particular program, plan, policy, or ordinance. In accordance with the TAG, the cumulative analysis must include consideration of any Related Projects within 0.50 miles of the Project Site and any transportation system improvements in the vicinity. The Original Project TIS identified a total of 76 Related Projects, many of which were within 0.50 miles of the Project Site.

Similar to the Current Project, each of the Related Projects considered in the Original Project TIS would be separately reviewed and approved by the City, including a check for their consistency with applicable policies. Collectively, the Current Project and the Related Projects add higher-density development in a high-quality transit area, which would increase pedestrian activity, support higher-frequency and higher-quality public transit, and reduce the need for single occupancy vehicles. Therefore, the Current Project, together with the Related Projects from the Original Project TIS, would neither create inconsistencies nor result in cumulative impacts with respect to the identified programs, plans, policies, and ordinances.

THRESHOLD T-2.1 – CAUSING SUBSTANTIAL VMT

The VMT metric is intended to promote the reduction of greenhouse gas (GHG) emissions, develop multimodal transportation networks, and diversify land uses. This encourages development that shortens the distance between housing, jobs, and services, increases the availability of affordable housing options in proximity to public transit, offers attractive non-vehicular transportation alternatives, provides strong TDM programs, and promotes walking and bicycling trips.

VMT Impact Thresholds

The TAG identifies significance thresholds to apply to development projects when evaluating potential VMT impacts consistent with the Office of Planning and Research (OPR) CEQA guidance. Threshold T-2.1 (Causing Substantial Vehicle Miles Traveled) of the TAG states that a residential project would result in a significant VMT impact if it cannot demonstrate average household VMT per capita of at least 15% below the existing standard for the Area Planning Commission (APC) in which it is located. Similarly, a commercial project would result in a significant VMT impact if it would generate work VMT per employee exceeding 15% below the existing average work VMT per employee for the APC area in which the project is located. Retail/restaurant uses under 50,000 sf such as the 3,000 sf of restaurant proposed at the Current Project are considered to be local-serving and to have a less-than-significant impact on VMT.

Additionally, the VMT impacts of the hotel visitors/guests must be analyzed. According to the TAG, such VMT would be considered to result in a less-than-significant impact if a hotel is proposed in a location closer to common or desired locations for guests and visitors than other existing hotel uses, thus resulting in shorter overall trips than would be expected without the project.

The Current Project is located in the Central APC and, according to the TAG, has an average household VMT per capita impact threshold of 6.0 and work VMT per employee impact threshold of 7.6, including the 15% reduction target. Therefore, should the Current Project's average household VMT per capita be equal to or lower than 6.0, average work VMT per employee be equal to or lower than 7.6, and the Project location be nearer to common destinations for hotel guests and visitors than existing hotel offerings, the Current Project's overall VMT impact would be less than significant.

VMT Analysis Methodology

LADOT developed *City of Los Angeles VMT Calculator Version 1.3* (July 2020) (VMT Calculator) to estimate project-specific daily work VMT per employee for developments within City limits, which are based on the following types of one-way trips:

- Home-Based Work Production: origin trips from a residential use to a workplace destination

- Home-Based Other Production: origin trips from a residential use to a non-workplace destination (e.g., retail, restaurant, etc.)

- Home-Based Work Attraction: destination trips to a workplace originating from a residential use

As detailed in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, May 2020), the household VMT per capita threshold applies to home-based work production and home-based other production trips, and the work VMT per employee threshold applies to home-based work attraction trips, as the location and characteristics of residences and workplaces are often the main drivers of VMT, as detailed in Appendix 1 of *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, December 2018). As noted in the TAG, small-scale

commercial components less than 50,000 sf of larger mixed-use development projects are not considered for the purposes of identifying significant work VMT impacts, as those trips are assumed to be local serving and would have a negligible effect on VMT.

The methodology in determining VMT based on the VMT Calculator is consistent with the TAG.

Travel Behavior Zone (TBZ). The City developed TBZ categories to determine the magnitude of VMT and vehicle trip reductions that could be achieved through TDM strategies. As detailed in *City of Los Angeles VMT Calculator Documentation*, the development of the TBZs considered the population density, land use density, intersection density, and proximity to transit of each Census tract in the City. The Current Project is located in an Urban (Zone 4) TBZ, which is defined as a high-density neighborhood characterized by multi-story buildings with a dense road network.

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

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

TDM Measures. Additionally, the VMT Calculator measures the reduction in VMT resulting from a project's incorporation of TDM strategies as project design features or mitigation measures. There are seven categories of TDM strategies included in the VMT Calculator, including parking, transit, education and encouragement, commute trip reductions, shared mobility, bicycle infrastructure, and neighborhood enhancement. TDM strategies within each of these categories have been empirically demonstrated to reduce trip-making or mode choice in such a way as to reduce VMT, as documented in *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association, 2010).

Resident/Employee VMT Analysis

The VMT Calculator was used to evaluate the Current Project VMT and compare it to the VMT impact criteria for residential and employee trips. The VMT Calculator utilized the Current Project's land uses and their respective sizes as the primary input (20 residential units, 60 hotel rooms, and 3,950 sf ground floor restaurant use). The analysis also incorporated two TDM strategies: the provision of bicycle parking (as required by the LAMC) and a reduced parking supply, as the Current Project proposes up to 97 parking spaces compared to a baseline LAMC requirement of 124 spaces.

Table 2 summarizes the Current Project VMT evaluation. The detailed worksheets from the VMT Calculator are provided in Attachment B. As shown, the VMT Calculator estimates that the Current Project would generate 175 total daily home-based production VMT with an average home-based VMT per capita of 3.9, which is less than the significance threshold of 6.0 VMT per capita. The Current Project would generate 318 total daily work VMT with an average work VMT per employee of 6.9, which is less than the significance threshold of 7.6 work VMT per employee. Therefore, the Current Project would not result in a significant impact on the basis of either home-based VMT per capita or work VMT per employee and no mitigation is required.

Visitor/Guest VMT Analysis

Additionally, the Current Project's hotel guest VMT was analyzed qualitatively according to the TAG. The Current Project would be a boutique hotel catering primarily to Koreatown visitors (whether for business or pleasure) and its centralized position in the heart of Koreatown is ideal for minimizing vehicle trips and trip lengths and, thus, VMT. The Wilshire Center / Koreatown route of LADOT's Downtown Area Shuttle (DASH) bus system has a stop within 800 feet of the Project Site at the intersection of Fedora Street & James M. Wood Boulevard, providing easy bus circulation throughout Koreatown. The Normandie/Wilshire Station of the Metro D Line is located less than 2,000 feet from the Project Site, providing access to downtown Los Angeles and the greater regional transit system.

Table 3 and Figure 2 summarize existing hotels located within 0.5 miles of the Project Site, along with their quality and approximate room totals. As shown, there are seven existing hotels or motels with a total of 770 rooms, nearly half of which are in a single 4-star hotel on Wilshire Boulevard (The Line LA). The Koreatown community is growing and densifying, and there is a need for additional hotels to keep up with visitor demand (for both business and pleasure trips). The Current Project would serve to help Koreatown visitors reside within the community rather than in outlying areas such as Hollywood, the Miracle Mile, or Downtown Los Angeles. Therefore, the Current Project would result in a net reduction in VMT from these visitor and guest trips, no significant impact would occur, and no mitigation is required.

Cumulative VMT Analysis

The TAG provides that cumulative effects of development projects are determined based on the consistency with the air quality and GHG reduction goals of *Connect SoCal – The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy* (Southern California Association of Governments, Adopted September 3, 2020) (RTP/SCS) in terms of development location, density, and intensity. The RTP/SCS presents a long-term vision for the region's transportation system through Year 2045 and balances the region's future mobility and housing needs with economic, environmental, and public health goals. As detailed in the TAG, for projects that do not demonstrate an impact by applying an efficiency-based impact threshold (i.e., household VMT per capita or work VMT per employee) in the project impact analysis, a less than significant impact conclusion is sufficient in demonstrating there is no cumulative VMT impact, as those projects are already shown to align with the long-term VMT and GHG reduction goals of the RTP/SCS. As the Current Project would not result in a significant VMT impact on those metrics, and would reduce guest/visitor VMT, the Current Project would similarly not result in a

cumulatively significant VMT impact under Threshold T-2.1 and no further evaluation would be required.

THRESHOLD T-3: 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 a project site, and may include safety, operational, or capacity impacts. Impacts can be related to potential conflicts between vehicles and pedestrians or bicycles 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 driveways in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to congested intersections.

Access Overview

There would be two vehicular access points to the Project Site. Primary access would be provided at a two-way driveway on Mariposa Avenue allowing direct access to the subterranean parking. A secondary access on W. 8th Street would lead to the at-grade valet pick-up/drop-off area adjacent to the hotel lobby, which would lead to a second ramp to subterranean parking.

Pedestrian access would be provided to the hotel lobby and restaurant space directly from the sidewalks. Long-term bicycle parking would be provided on the first subterranean parking level accessible through the hotel lobby and short-term parking would be provided on the ground level accessible from the sidewalk.

Current Project Hazards Analysis

The Current Project driveway on Mariposa Avenue would be the standard width for a two-way commercial driveway (approximately 28 feet) based on *Manual of Policies and Procedures* (LADOT, December 2008, Updated 2020) Section 321. The driveway to W. 8th Street would be the standard width for a one-way access point (approximately 16 feet). Each driveway intersects the public road at right angles to allow pedestrians and bicyclists to observe vehicles within the driveway and provide good driver visibility. The driveways serve a limited parking supply (up to 97 total spaces) and, combined, would serve an average of approximately one vehicle every 60 seconds during the busiest hours of the day (based on the peak hour trip generation estimates shown in Table 1). Due to the limited vehicle activity, there would be minimal queuing in or out of any of the driveways. Based on the analysis from the Original Project TIS, which considered approximately the same trip generation during the busiest hour, the driveways and the adjacent streets can accommodate Current Project traffic. Therefore, no hazards are expected to occur related to operation of the driveway, and the Current Project would not substantially affect operating conditions along the adjacent public streets.

The Project Site is located within a densely developed urban area with robust multi-modal transportation options. Substantial existing pedestrian and bicycle activity occurs within the vicinity, and the Current Project would enhance the vibrancy of the area and increase bicycle and

pedestrian activity due to its new residents and the ground-floor commercial space it would provide, as well as the new visitors it would host in the hotel rooms. No unusual or new obstacles are presented in the Current Project design that would be considered hazardous to pedestrians or bicyclists or out of character for the urban environment. Therefore, safety impacts related to pedestrian and bicycle activity are not anticipated. Further, the Current Project would not preclude or interfere with the implementation of any future roadway improvements on adjacent streets benefiting pedestrians, bicycles, or transit.

Cumulative Analysis

The TAG indicates that cumulative impacts for Threshold T-3 require a review of Related Projects with access points proposed along the same block(s) as a proposed project in order to determine the combined impact and the proposed project's contribution. None of the Related Projects considered in the Original Project TIS are located on the same block as the Project Site. A new multi-family residential building recently opened on Mariposa Avenue approximately 80 feet south of the Project Site, but the access driveway is at the south end of that building, nearly 300 feet away from the Current Project's proposed driveway. These driveways would not interfere with each other's operations.

As with the Current Project, the Related Projects would be individually responsible for complying with the City's design standards and the guidelines outlined in Threshold T-3 to address potential safety conflicts. Thus, the Current Project and Related Projects would not result in a cumulative impact under Threshold T-3.

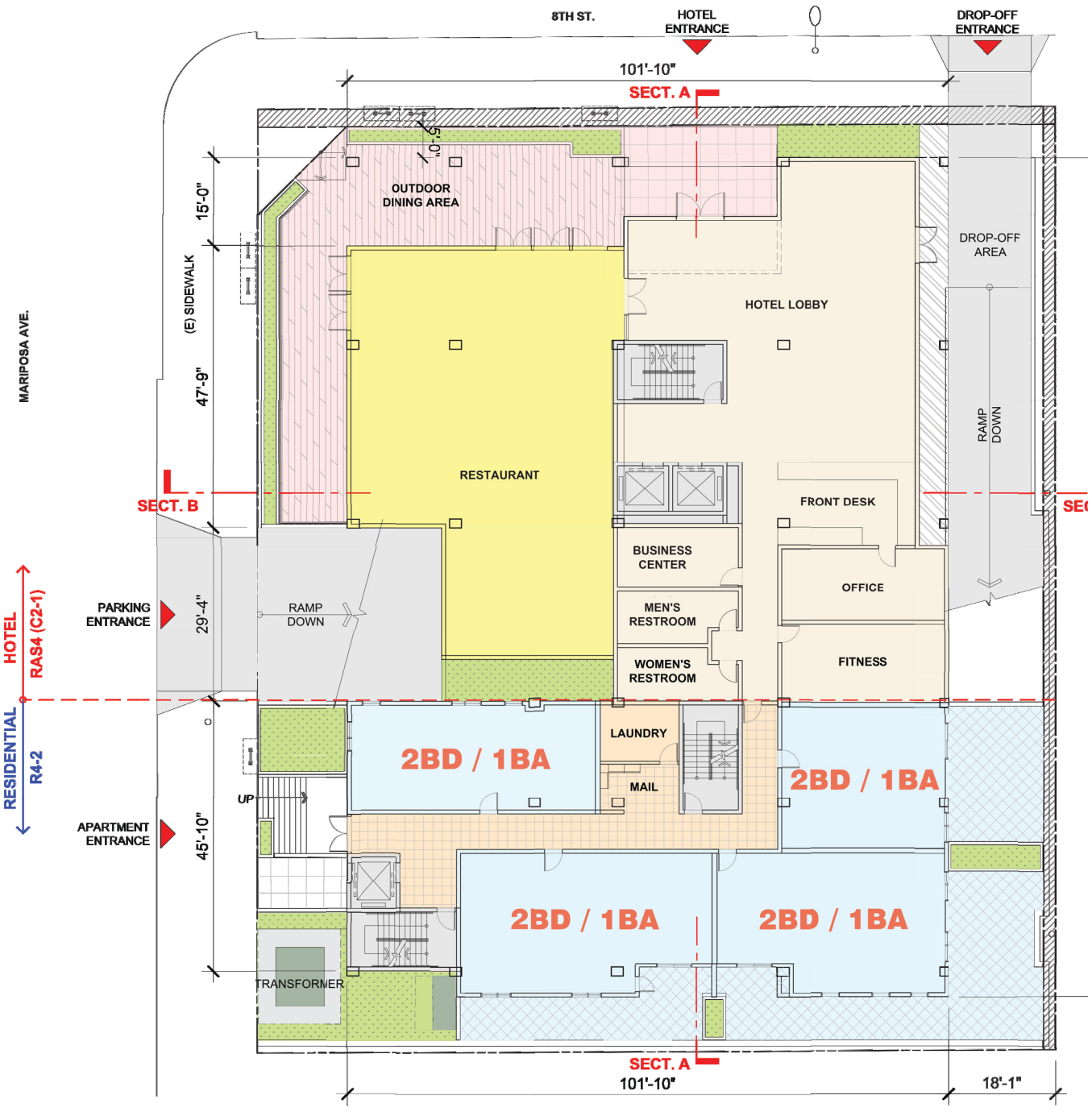
CEQA FREEWAY SAFETY ANALYSIS

LADOT issued *Interim Guidance for Freeway Safety Analysis* (May 1, 2020) (City Freeway Guidance) identifying requirements for a CEQA safety analysis of the California Department of Transportation facilities as part of a transportation assessment. The City Freeway Guidance relates to the identification of potential safety impacts at freeway off-ramps as a result of increased traffic from development projects. It identifies a minimum criterion of 25 peak hour trips on a single off-ramp before quantitative analysis is required. When considering the number of inbound Current Project trips during any peak hour (a maximum of 34), the distribution of Current Project traffic in all directions, and the Project Site's distance from any freeway interchanges (it is located approximately 1.60 miles southwest of US 101 and approximately 1.40 miles north of I-10), the Current Project would not generate enough trips on any freeway ramp to meet the 25-trip threshold, and no further analysis is required.

CONCLUSION

The Current Project would not generate any significant impacts under the City's CEQA thresholds T-1, T-3, or Freeway Safety Analysis requirements and, therefore, no mitigation is required for those components. The Current Project would similarly not generate a significant impact based on home-based VMT per capita, work VMT per employee, or hotel visitor/guest VMT. Like the Original Project, the Current Project would not result in a LOS-based impact on any of the

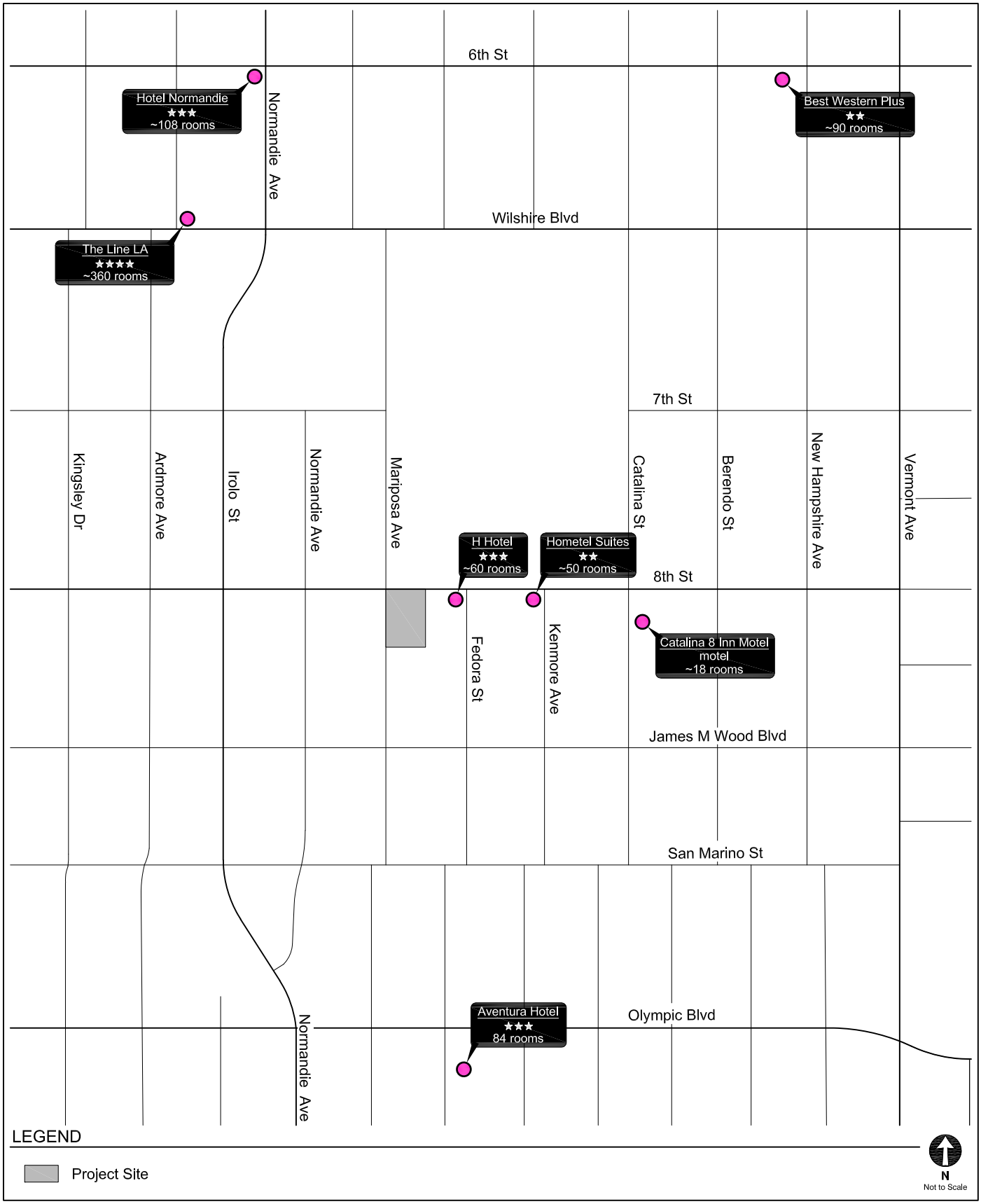
signalized intersections analyzed in the Original Project TIS and, therefore, no further non-CEQA analysis is required.



Source: EWAI Architects. March, 2023.

CURRENT PROJECT SITE PLAN

FIGURE 1



NEARBY HOTELS

FIGURE 2

TABLE 1
CURRENT PROJECT TRIP GENERATION ESTIMATES

Land Use	ITE Land Use	Rate	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Multi-Family Housing (Mid-Rise)	221	per unit	[b]	23%	77%	0.37	61%	39%	0.39
Hotel	310	per room	[b]	56%	44%	0.46	51%	49%	0.59
High-Turnover (Sit-Down) Restaurant	932	per ksf	[b]	55%	45%	9.57	61%	39%	9.05
Current Project Trip Generation Estimates									
Multi-Family Housing (Mid-Rise)	221	20 units	[b]	2	5	7	5	3	8
Transit/Walk Adjustment - 10% [c]				*0*	*(1)*	*(1)*	*(1)*	*0*	*(1)*
Hotel	310	60 rooms	[b]	16	12	28	18	17	35
Transit/Walk Adjustment - 10% [c]				*(2)*	*(1)*	*(3)*	*(2)*	*(2)*	*(4)*
Restaurant	932	3,950 sf	[b]	21	17	38	22	14	36
Internal Capture Adjustment - 10% [d]				*(2)*	*(2)*	*(4)*	*(2)*	*(2)*	*(4)*
Transit/Walk Adjustment - 10% [c]				*(2)*	*(1)*	*(3)*	*(2)*	*(1)*	*(3)*
Pass-by Adjustment - 20% [e]				*(3)*	*(3)*	*(6)*	*(4)*	*(2)*	*(6)*
Gross Trips - Current Project			**533**	**30**	**26**	**56**	**34**	**27**	**61**
[f] *Gross Trips - Original Project*			*694*	*24*	*20*	*44*	*43*	*33*	*76*
[g] *Gross Trips - First Revised Project*			*755*	*38*	*31*	*69*	*43*	*35*	*78*

Notes:

[a] Trip generation source for Current Project is *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers, 2021.

[b] Daily trip generation estimates are from LADOT's VMT Calculator tool and are cumulative for all Current Project land uses.

[c] Per LADOT's *Transportation Assessment Guidelines,* because the Project Site is located adjacent to a transit corridor, a 10% trip reduction may be applied to account for transit usage and walking trips.

[d] Internal capture adjustments account for person trips made by Project residents to the commercial uses.

[e] Pass-by adjustments account for Project trips made as an intermediate stop on the way from an origin to a primary trip destination without route diversion.

[f] Trip generation estimates for the First Revised Project are from the First Revise Project CEQA Memo and are provided for comparison to the Current Project.

[g] Trip generation estimates for the Original Project are from the Original Project TIS and are provided for comparison to the Current Project.

TABLE 2
VMT ANALYSIS SUMMARY

Description	
Revised Project Land Uses	
Multi-Family Housing (Mid-Rise)	20
Hotel	60
High-Turnover Restaurant	3,950 sf
Project Site Characteristics [a]	
Area Planning Commission	Central
Travel Behavior Zone (TBZ) [b]	Urban
Maximum VMT Reduction [c]	*75%*
VMT Analysis Results	
Daily Vehicle Trips	546
Daily VMT	3,586
Total Household VMT	175
Household VMT per Capita [d]	3.9
Impact Threshold	6.0
Significant Impact	**NO**
Total Work VMT	318
Work VMT per Employee [e]	6.9
Impact Threshold	7.6
Significant Impact	**NO**

Notes:

[a] Project Site characteristics and analysis based on the *City of Los Angeles VMT Calculator Version 1.3* (July 2022).

[b] "Urban" TBZs are characterized in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, May 2020) as higher density neighborhoods that include multi-story buildings with a dense road network.

[c] The maximum allowable VMT reduction is based on the Project's designated TBZ.

[d] Household VMT per Capita is based on the "home-based work production" trip types.

[e] Work VMT per Employee is based on the "home-based work attraction" trip types.

TABLE 3
NEARBY HOTELS

Name	**Address**	**Stars** [a]	**Rooms** [b]
H Hotel	3206 W. 8th St	3	60
Hometel Suites	3160 W. 8th St	2	50
Catalina 8 Inn Motel	812 S. Catalina St	motel	18
The Line LA	3515 Wilshire Blvd	4	360
Hotel Normandie LA	605 S. Normandie Ave	3	108
Aventura Hotel	1020 Fedora St	3	84
Best Western Plus	603 S. New Hampshire Ave	2	90

Notes:
[a] Star rating obtained from Google Maps.
[b] Number of rooms estimated based on internet imagery, except as noted.
[c] Number of rooms obtained from Los Angeles Department of City Planning records.

Attachment A

Plans, Policies, and Programs Consistency Worksheet

Plans, Policies and Programs Consistency Worksheet

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

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

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

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

I. SCREENING CRITERIA FOR POLICY ANALYSIS

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

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

☑ Yes ☐ No

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

☐ Yes ☑ No

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

☑ Yes ☐ No

II. PLAN CONSISTENCY ANALYSIS

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

These questions address potential conflict with:

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

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

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

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.1 Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? ☑ Yes ☐ No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation. ☑ Yes ☐ No ☐ N/A

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

☑ Yes ☐ No ☐ N/A

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

A.4 If the answer to **A.3. is NO**, is the project applicant asking to waive from the dedication standards?

☐ **Yes** ☐ **No** ☑ N/A

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

W. 8th Street - Avenue II
Frontage 1 Existing PROW'/Curb' : Existing 40(half) Required 43 (half) Proposed 43

Mariposa Avenue - Local Street
Frontage 2 Existing PROW'/Curb' : Existing 60 Required 60 Proposed 60

Frontage 3 Existing PROW'/Curb' : Existing _____ Required _____ Proposed _____

Frontage 4 Existing PROW'/Curb' : Existing _____ Required _____ Proposed _____

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

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

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

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

To see the location of the above networks, see **Transportation Assessment Support Map**.[1]

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

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

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

B.1 Project-Initiated Changes to the PROW Dimensions

These questions address potential conflict with:

> ***Mobility Plan 2035 Policy 2.1*** *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*
>
> ***Mobility Plan 2035 Policy 2.3*** *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*
>
> ***Mobility Plan 2035 Policy 3.2 –*** *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*
>
> ***Mobility Plan 2035 Policy 2.10*** *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*
>
> **Mobility Plan 2035 Street Designations and Standard Roadway Dimensions**

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

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

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

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

☑ **Yes** ☐ No

B.2 Driveway Access

These questions address potential conflict with:

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

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

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

Site Planning Best Practices:

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

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

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

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

☑ **Yes** ☐ No

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

Impact Analysis

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

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

To see the location of the above networks, see **Transportation Assessment Support Map**.[3]

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

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

☐ **Yes** ☑ No ☐ N/A

[2] for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

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

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

☐ **Yes** ☑ No ☐ N/A

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

C. Network Access

C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

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

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

☐ Yes ☑ No

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

☐ Yes ☐ **No** ☑ N/A

C.2 New Cul-de-sacs

These questions address potential conflict with:

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

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

☐ Yes ☑ No

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

☐ Yes ☐ **No** ☑ N/A

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

D. Parking Supply and Transportation Demand Management

These questions address potential conflict with:

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

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

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

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

☐ Yes ☑ No

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

☐ Yes ☐ **No** ☑ N/A

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

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

☑ Yes ☐ **No**

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

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

☑ Yes ☐ No

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

☑ Yes ☐ **No** ☐ N/A

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

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

E. Consistency with Regional Plans

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

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

☑ Yes ☐ No

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

☐ Yes ☑ No ☐ N/A

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

☑ Yes ☐ No ☐ N/A

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

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

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

References

BOE Street Standard Dimensions S-470-1 http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1_20151021_150849.pdf

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

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

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

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

ATTACHMENT D.1: CITY PLAN, POLICIES AND GUIDELINES

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

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

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

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

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

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

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

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

Attachment B

VMT Worksheets

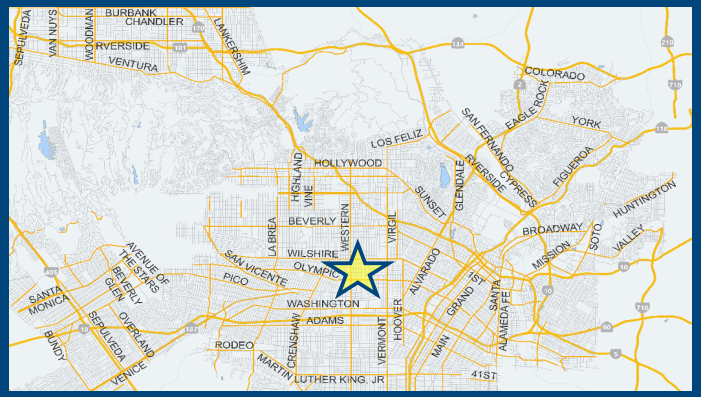
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project:

Scenario: Current Project

Address: 3216 W 8TH ST, 90005



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	20	DU
Housing | Hotel	60	Rooms
Retail | High-Turnover Sit-Down Restaurant	3.95	ksf

TDM Strategies

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

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

A Parking

Reduce Parking Supply — ☑ Proposed Prj ☐ Mitigation
- 124 — city code parking provision for the project site
- 97 — actual parking provision for the project site

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

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

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

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

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With
546 Daily Vehicle Trips	**546** Daily Vehicle Trips
3,586 Daily VMT	**3,586** Daily VMT
3.9 Household VMT per Capita	**3.9** Household VMT
6.9 Work VMT per Employee	**6.9** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With
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

9/29/2023

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 29, 2023
Project Name:
Project Scenario: Current Project
Project Address: 3216 W 8TH ST, 90005

Version 1.3

Project Information			
Land Use Type		**Value**	**Units**
Housing	*Single Family*	*0*	*DU*
	Multi Family	20	DU
	Townhouse	*0*	*DU*
	Hotel	60	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	3.950	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	*General Office*	*0.000*	*ksf*
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 29, 2023
Project Name:
Project Scenario: Current Project
Project Address: 3216 W 8TH ST, 90005

Version 1.3

Analysis Results

Total Employees: 46
Total Population: 45

Proposed Project		*With Mitigation*	
546	**Daily Vehicle Trips**	**546**	**Daily Vehicle Trips**
3,586	**Daily VMT**	**3,586**	**Daily VMT**
3.9	**Household VMT per Capita**	**3.9**	**Household VMT per Capita**
6.9	**Work VMT per Employee**	**6.9**	**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

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: September 29, 2023
Project Name:
Project Scenario: Current Project
Project Address: 3216 W 8TH ST, 90005

Version 1.3

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	124	124
		Actual parking provision (spaces)	97	97
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

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

(cont. on following page)

TDM Strategy Inputs, Cont.

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

(cont. on following page)

TDM Strategy Inputs, Cont.

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

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: September 29, 2023
Project Name:
Project Scenario: Current Project
Project Address: 3216 W 8TH ST, 90005

Version 1.3

TDM Adjustments by Trip Purpose & Strategy

Place type: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Parking cash-out	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Price workplace parking	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Residential area parking permits	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
Transit	Reduce transit headways	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Transit subsidies	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
Education & Encouragement	Voluntary travel behavior change program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
Commute Trip Reductions	Required commute trip reduction program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Employer sponsored vanpool or shuttle	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Ride-share program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
Shared Mobility	Car-share	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
	School carpool program	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Urban

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

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*
MAX. TDM EFFECT	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

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

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

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: September 29, 2023
Project Name:
Project Scenario: Current Project
Project Address: 3216 W 8TH ST, 90005

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	18	-33.3%	12	7.5	135	90
Home Based Other Production	50	-58.0%	21	5.1	255	107
Non-Home Based Other Production	141	-5.7%	133	8.7	1,227	1,157
Home-Based Work Attraction	66	-21.2%	52	6.9	455	359
Home-Based Other Attraction	549	-48.8%	281	5.5	3,020	1,546
Non-Home Based Other Attraction	123	-5.7%	116	6.8	836	789

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	-11.4%	11	80	-11.4%	11	80
Home Based Other Production	-11.4%	19	95	-11.4%	19	95
Non-Home Based Other Production	-11.4%	118	1,025	-11.4%	118	1,025
Home-Based Work Attraction	-11.4%	46	318	-11.4%	46	318
Home-Based Other Attraction	-11.4%	249	1,369	-11.4%	249	1,369
Non-Home Based Other Attraction	-11.4%	103	699	-11.4%	103	699

MXD VMT Methodology Per Capita & Per Employee

Total Population: 45
Total Employees: 46
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**175**	**175**
Total Home Based Work Attraction VMT	**318**	**318**
Total Home Based VMT Per Capita	**3.9**	**3.9**
Total Work Based VMT Per Employee	**6.9**	**6.9**

TRANSPORTATION IMPACT STUDY
FOR THE
3216 W. 8TH STREET
MIXED-USE PROJECT

LOS ANGELES, CALIFORNIA

October 2017

Prepared for:

EWAI ARCHITECTS

Prepared by:

GIBSON TRANSPORTATION CONSULTING, INC.
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Ref: J1570

TRANSPORTATION IMPACT STUDY
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LOS ANGELES, CALIFORNIA

OCTOBER 2017

PREPARED FOR

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PREPARED BY

Gibson
transportation consulting, inc.

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Executive Summary

This study presents the transportation impact analysis for the proposed development of a mixed-use project (Project) at 3216 W. 8th Street (the Project Site) in the Wilshire Center/Koreatown community of the City of Los Angeles (the City).

PROJECT DESCRIPTION

EWAI Architects (the Applicant) proposes to construct a seven-level mixed-use building over three levels of subterranean parking. The Project would include a total of eight condominium units, an 80-room hotel, 4,808 square feet (sf) of ground-floor retail, and a 2,465 sf karaoke room in a below-grade level. Additional amenity space, including a bar, fitness center, and business center, would be for hotel guests only. The Project Site is currently occupied by a surface parking lot of approximately 38 spaces and an apartment building with four units. The Project would provide 142 vehicular parking spaces and 32 bicycle parking spaces, including 20 long-term and 12 short-term spaces. Vehicular access would be provided via full-access driveways on Mariposa Avenue and 8th Street. The driveway on Mariposa Avenue would provide direct access to parking, while the 8th Street driveway would provide access to the valet pick-up and drop-off area. A secondary ramp from the valet area to the subterranean parking would be for valet operators only so they would not need to use public roads to travel between the valet area and the parking structure.

STUDY SCOPE

The study included the evaluation of the potential impacts caused by the Project on the street system surrounding the Project Site. A total of nine signalized intersections and one unsignalized intersection in the vicinity of the Project Site were selected for detailed traffic analysis for existing Year 2017 and future Year 2022 conditions, without and with Project traffic, during the morning and afternoon peak hours. Existing traffic volumes were collected in June

2017, November and April 2016, and November 2015, and future traffic conditions were developed by adding traffic from proposed developments in the vicinity and applying a growth factor.

ANALYSIS METHODOLOGY

Signalized intersection capacity was analyzed using the Critical Movement Analysis (CMA) methodology in accordance with City traffic study guidelines. Significant impacts were identified based on the City's sliding scale criteria in which the allowable increase in intersection volume-to-capacity ratio due to Project traffic decreases as the intersection operating condition (level of service [LOS]) worsens. Unsignalized intersections were evaluated to determine the need for the installation of traffic signals on the basis of LOS and a signal warrant analysis.

PROJECT TRAFFIC

Peak hour Project trip generation was estimated using rates published in *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012). Trip credits were applied, as allowed by the City, for transit usage, internal capture, and pass-by trips. The Project trip generation estimates are summarized in the table below.

Project Trip Generation Estimates

Trips	Daily	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Project Trips	694	24	18	42	42	32	74

Project trips were distributed through the Study Area based on the location of employment, commercial, and residential centers from which residents, patrons, and employees of the Project would be drawn, characteristics of the street system serving the Project Site, the location of the Project Site driveways, and existing traffic conditions. In general, traffic was

distributed to/from the north (25%), the east (30%), the south (20%), and the west (25%). In this manner, Project trips were distributed to the study intersections for the analysis.

ANALYSIS RESULTS

Based on the analysis conducted in this study, none of the signalized study intersections would be significantly impacted by Project traffic during the morning or afternoon peak hours under either Existing with Project Conditions or Future with Project Conditions. Therefore, no mitigation is required.

Chapter 1
Introduction

This study presents the transportation impact analysis for the proposed development of a mixed-use project (Project) located at 3216 W. 8th Street (Project Site) in the Wilshire Center/Koreatown community of the City of Los Angeles (the City). The methodology and base assumptions used in the analysis were established in conjunction with the Los Angeles Department of Transportation (LADOT).

PROJECT DESCRIPTION

EWAI Architects (Applicant) proposes to construct a seven-level mixed-use building over subterranean parking. The Project would include a total of eight condominium units, an 80-room hotel, and 7,273 square feet (sf) of commercial space, including 4,808 sf of ground-floor retail and a 2,465 sf karaoke room in a below-grade level. Additional amenity space, including a bar, fitness center, and business center, would be for hotel guests only. The Project Site is currently occupied by a surface parking lot of approximately 38 spaces and an apartment building with four units. The conceptual Project Site plan is shown in Figure 1.

The Project would provide 142 vehicular parking spaces in three subterranean levels and 32 bicycle parking spaces, including 20 long-term and 12 short-term spaces. Vehicular access to the Project Site would be provided via full-access driveways on Mariposa Avenue and 8th Street. The driveway on Mariposa Avenue would provide direct access to parking, while the 8th Street driveway would provide access to the valet pick-up and drop-off area. A secondary ramp from the valet area to the subterranean parking would be for valet operators only so they would not need to use public roads to travel between the valet area and the parking structure.

PROJECT LOCATION AND STUDY AREA

The Project Site is located on the southeast corner of Mariposa Avenue & 8th Street. It is located approximately 1.4 miles north of the Santa Monica Freeway (I-10), which provides regional transportation between downtown Los Angeles and Santa Monica. It is also approximately 1.5 miles southwest of the Hollywood Freeway (US 101), which provides regional transportation between downtown Los Angeles and Hollywood, and approximately 1.7 miles northwest of the Harbor Freeway (I-110), which travels from Pasadena to San Pedro. The Project Site and surrounding community is served by major streets such as Wilshire Boulevard, 8th Street, Normandie Avenue, Irolo Street, and Vermont Avenue.

As shown in Figure 2, the Project's Study Area includes a geographic area bounded by Wilshire Boulevard to the north, Vermont Avenue to the east, James M Wood Boulevard (9th Street) to the south, and Irolo Street to the west. Detailed transportation analyses were conducted at key intersections within the Study Area.

Transit bus service is provided throughout the Study Area, including along each of the major streets listed above. In addition to local bus lines, the Los Angeles County Metropolitan Transportation Authority (Metro) operates a rapid (limited stop) bus on Wilshire Boulevard and Vermont Avenue. The Metro Purple Line subway stops at the Wilshire/Normandie station, 0.35 miles northwest of the Project Site, and the Metro Purple Line and Metro Red Line subways stop at the Wilshire/Vermont station, 0.65 miles northeast of the Project Site. The Metro Purple Line and Red Line provide frequent high-capacity service to downtown Los Angeles and Union Station. The Red Line also travels to Hollywood and North Hollywood. The Metro Purple Line has a western extension to La Cienega Boulevard and eventually to Westwood that is currently under construction.

INTERSECTION ANALYSIS METHODOLOGY

The scope of analysis for this study was developed in consultation with LADOT. The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified as part of the study approach and were outlined in a

Memorandum of Understanding (MOU) which was reviewed and approved by LADOT. A copy of the signed MOU is provided in Appendix A.

This study analyzes the potential Project-generated transportation impacts on the street system in the vicinity of the Project Site as compared to existing conditions and projected future conditions at the time the Project is expected to be completed (Year 2022). Potential intersection impacts were evaluated for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods. A total of nine signalized intersections and one unsignalized intersection in the vicinity of the Project Site were selected for detailed transportation analysis. They are listed in Table 1 and shown in Figure 2.

This transportation study evaluated the potential for impacts caused by the Project on the street system surrounding the Project Site. Consistent with *Transportation Impact Study Guidelines* (LADOT, December 2016), the following traffic conditions were developed and analyzed as part of this study:

- Existing Conditions (Year 2017) – The analysis of existing traffic conditions provides a basis for the assessment of future traffic conditions. The Existing Conditions analysis includes a description of key area streets and highways, traffic volumes and current operating conditions, and transit service in the Study Area. Intersection turning movement counts were collected in June 2017, November 2016, April 2016, and November 2015. Traffic counts collected prior to Year 2017 were increased by 1% per year to represent Year 2017 conditions. Lane configurations and signal phasing data for the analyzed intersections were collected in June 2017. Intersection lane configurations are provided in Appendix B, traffic count worksheets in Appendix C, and level of service (LOS) worksheets in Appendix D.

- Existing with Project Conditions (Year 2017) – This analysis condition projects the potential intersection operating conditions that could be expected if the Project were built under Existing Conditions. This analysis evaluates the potential Project-related traffic impacts as compared to Existing Conditions.

- Future without Project Conditions (Year 2022) – This analysis projects the future traffic growth and intersection operating conditions that could be expected as a result of regional growth and related project traffic in the Study Area by Year 2022. The Future without Project Conditions are projected by adding ambient traffic growth and traffic from related projects to Existing Conditions. This analysis provides the conditions by which the Project impacts are evaluated in the future at full buildout.

- Future with Project Conditions (Year 2022) – This analysis projects the potential intersection operating conditions that could be expected if the Project were built in the

projected buildout year. This analysis identifies the potential incremental impacts of the Project at full buildout, prior to mitigation, on projected future traffic operating conditions by adding the Project-generated traffic to the Future without Project traffic forecasts.

Signalized Intersection Analysis Methodology

Intersection capacity has been analyzed using the "Critical Movement Analysis (CMA) – Planning" (*Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, Transportation Research Board, 1980) methodology in accordance with the *Transportation Impact Study Guidelines*. The CMA methodology was implemented using LADOT's Calcadb Lite spreadsheet application to analyze intersection operating conditions. The methodology calculates the volume-to-capacity (V/C) ratio, which is used to determine the intersection LOS according to the LOS definitions provided in Table 2. LOS worksheets for each scenario are provided in Appendix D.

The significance of the potential impacts of Project generated traffic at the signalized study intersections was determined using criteria identified in *Transportation Impact Study Guidelines*. LADOT guidelines indicate that a project is considered to have a significant transportation impact on a signalized intersection if the increase in the V/C ratio attributable to the project exceeds a specific threshold depending on the final intersection LOS. LADOT has developed a sliding scale methodology in which the minimum allowable increase in the V/C ratio attributable to a project decreases as the V/C ratio of the intersection increases:

Intersection Conditions with Project Traffic		**Significant Impact Threshold for Project-related Increase in V/C Ratio**
LOS	**V/C**	
C	0.701 – 0.800	Equal to or greater than 0.04
D	0.801 – 0.900	Equal to or greater than 0.02
E, F	> 0.900	Equal to or greater than 0.01

Source: City of Los Angeles.

The relative impact of the added traffic volumes to be generated by the Project was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the Project.

Traffic Signal Automation

The CMA analysis for signalized study intersections accounts for the use of advanced automation in the traffic signal controllers. Each signalized intersection in Los Angeles is equipped with the Automated Traffic Surveillance and Control (ATSAC) system and the Adaptive Traffic Control System (ATCS), which together provide a computer-based traffic signal control program that automatically and continually adjusts and optimizes traffic signal timing based on real-time traffic conditions. The automation system seeks to minimize the amount of delay and the number of vehicle stops throughout the transportation network. It also provides real-time video monitoring capabilities to LADOT engineers. LADOT estimates that this system improves intersection capacity by 10% over a traffic signal without the ATSAC and ATCS system. This capacity increase is applied to each intersection within the Calcadb Lite software and, therefore, is inherent in the analysis results.

Unsignalized Intersection Analysis Methodology

Based on *Transportation Impact Study Guidelines*, the unsignalized intersection (Intersection #10, Mariposa Avenue & James M Wood Boulevard) was not analyzed for potential significant impacts. Rather, it was evaluated to determine the need for the installation of traffic signals on the basis of LOS and a signal warrant analysis. The *2010 Highway Capacity Manual* (Transportation Research Board, 2010) (HCM) methodology was used to determine the worst-case delay experienced by vehicles turning left from Mariposa Avenue to James M Wood Boulevard. The calculated delay is used to determine the intersection LOS according to the LOS definitions provided in Table 2. If the analysis projects LOS E or F under the Future with Project Conditions, then the intersection would be further evaluated for the potential installation of a new traffic signal through a traffic signal warrant analysis.

ADDITIONAL TRAFFIC ANALYSES

An analysis also was conducted according to *2010 Los Angeles County Congestion Management Program* (Metro, 2010) (CMP) guidelines. The CMP is a State-mandated program

that serves as the monitoring and analytical basis for transportation funding decisions in the County made through the Regional Transportation Improvement Program and State Transportation Improvement Program processes. The CMP requires that a traffic impact analysis be performed (1) for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours and (2) all mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours. In addition, it requires a review of potential impacts to the regional transit system.

The required CMP analyses were performed, as detailed in Chapter 7, in accordance with the guidelines in the CMP.

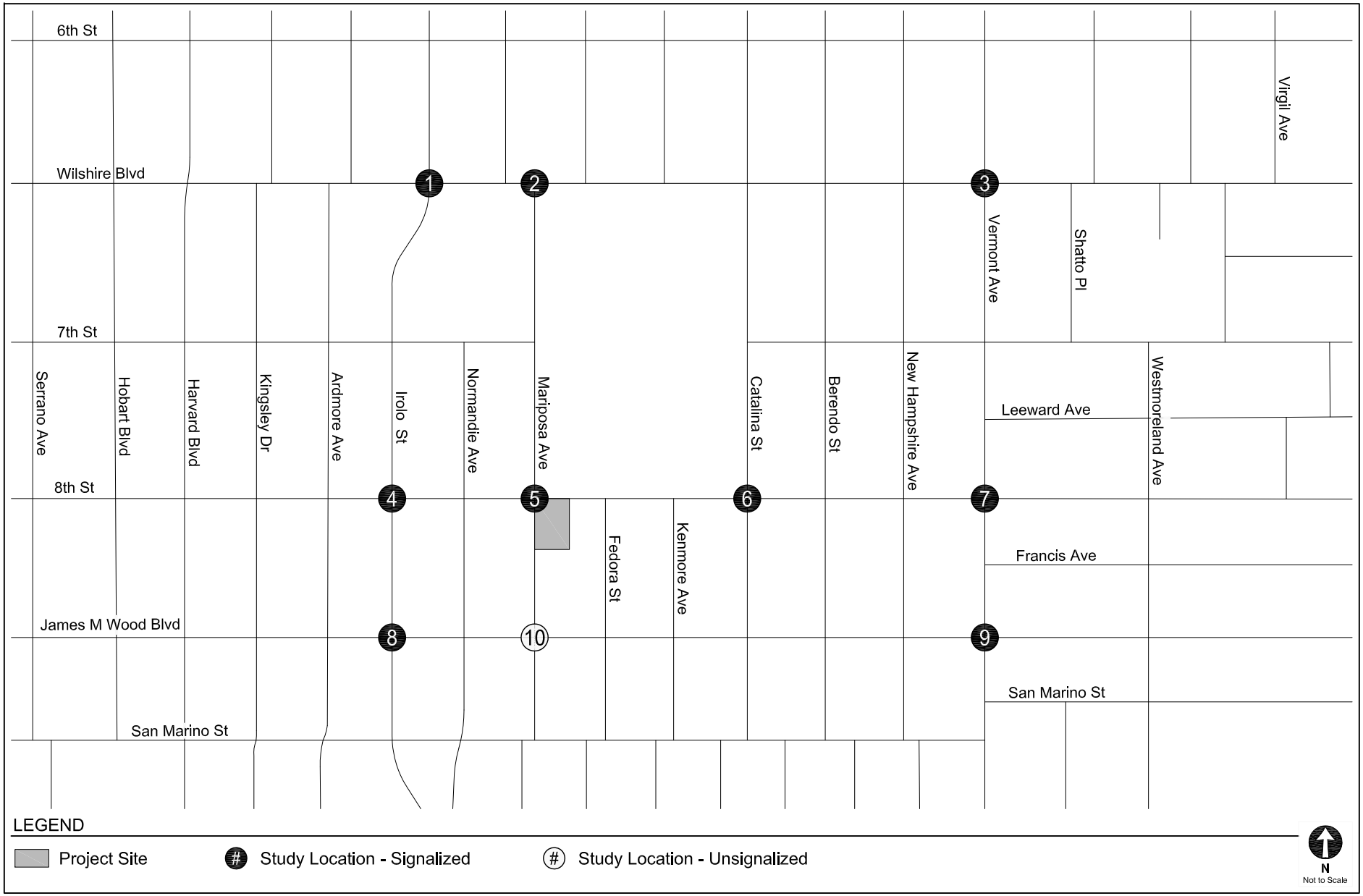
ORGANIZATION OF REPORT

This report is divided into 10 chapters, including this introduction. Chapter 2 describes the existing circulation system, traffic volumes, and traffic conditions in the Study Area. Chapter 3 forecasts the Future without Project Conditions. Chapter 4 describes the procedure used to forecast Project traffic volumes and distribution throughout the Study Area. Chapter 5 presents the intersection operating conditions and potential traffic impacts associated with construction of the Project. Chapter 6 presents the analysis of the unsignalized intersection. Chapter 7 presents the regional CMP analysis. Chapter 8 describes site access and internal circulation. Chapter 9 reviews the proposed parking and the City's parking requirement for the Project. Chapter 10 presents the impacts associated with the construction phase of the Project. The Appendices contain supporting documentation and additional details of the technical analyses.

Source: EWAI Architects, October, 2017.

PROJECT SITE PLAN

FIGURE 1



STUDY AREA

FIGURE 2

TABLE 1
STUDY INTERSECTIONS

No	Intersection
Signalized Intersections	
1.	Normandie Avenue / Irolo Street & Wilshire Boulevard
2.	Mariposa Avenue & Wilshire Boulevard
3.	Vermont Avenue & Wilshire Boulevard
4.	Irolo Street & 8th Street
5.	Mariposa Avenue & 8th Street
6.	Catalina Street & 8th Street
7.	Vermont Avenue & 8th Street
8.	Irolo Street & James M Wood Boulevard
9.	Vermont Avenue & James M Wood Boulevard
Unsignalized Intersections	
10.	Mariposa Avenue & James M Wood Boulevard

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

Level of Service	Signalized V/C Ratio [a]	Unsignalized Delay (seconds) [b]	Definition
A	0.000 - 0.600	0.0 - 10.0	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 - 0.700	10.1 - 15.0	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 - 0.800	15.1 - 25.0	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	25.1 - 35.0	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	0.901 - 1.000	35.1 - 50.0	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	> 50.0	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.

Notes

[a] *Transportation Research Circular No. 212, Interim Materials on Highway Capacity,* Transportation Research Board, 1980.

[b] *2010 Highway Capacity Manual,* Transportation Research Board, 2010.

Chapter 2
Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of Existing Conditions in the Project Study Area. The Existing Conditions analysis includes an assessment of the existing freeway and street systems, an analysis of traffic volumes and current operating conditions, and an assessment of the existing public transit service, as well as pedestrian and bicycle circulation.

STUDY AREA

The Project's Study Area, shown in Figure 2, includes a geographic area approximately 0.4 miles (north-south) by 0.5 miles (east-west) that is bounded by Wilshire Boulevard to the north, Vermont Avenue to the east, James M Wood Boulevard (9th Street) to the south, and Irolo Street to the west.

The transportation analysis Study Area generally comprises all intersections that have potential to experience significant transportation impacts from project traffic as defined by the City's impact criteria. The Project Study Area was established in consultation with the City, taking into consideration the Project's peak hour trip generation estimates, the anticipated distribution of Project traffic, and the existing operation of nearby intersections and corridors.

A total of 10 intersections, including nine signalized and one unsignalized, were identified during the MOU process for detailed analysis. Figure 2 illustrates the location of the Project Site in relation to the surrounding street system and the 10 study intersections. The existing lane configurations at the analyzed intersections are provided in Appendix B.

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including Freeways, Boulevards, Avenues, Collectors and Local Streets which provide regional, sub-regional, or local access and circulation within the Study Area. Street classifications are designated in the *Mobility Plan 2035: An Element of the General Plan* (Los Angeles Department of City Planning, May 2015) (Mobility Plan 2035). The available facilities in the Study Area are defined by the following:

- Boulevards are arterial streets that provide primary through traffic routes with limited access to adjacent properties. Boulevards are divided into two categories:
    - Boulevard I typically provides 100 feet of paved width within 136 feet of right-of-way.
    - Boulevard II typically provides 80 feet of paved width within 110 feet of right-of-way.
- Avenues are arterial streets that serve through traffic, as well as provide access to major commercial activity centers. Avenues are divided into three categories:
    - Avenue I typically provides 70 feet of paved width within 100 feet of right-of-way.
    - Avenue II typically provides 56 feet of paved width within 86 feet of right-of-way.
    - Avenue III typically provides 46 feet of paved width within 72 feet of right-of-way.
- Collector Streets are intended to assist local traffic flow to Avenues and are typically located at quarter-mile intervals in a grid system.
- Local Streets provide circulation for local adjacent neighborhoods and do not typically serve commercial uses. Local streets provide connections to collector streets, which in turn, connect to the arterial street network.

The following is a brief description of the major roadways in the Study Area, including their classifications under Mobility Plan 2035:

Roadways

- Wilshire Boulevard – Wilshire Boulevard is a designated Avenue I running east-west approximately 0.3 miles north of the Project Site. It generally provides four travel lanes, left-turn lanes at intersections, and an exclusive bus rapid transit lane in each direction. Metered parking with peak period restrictions is generally available on both sides of the street. Inside lanes are generally 10 feet wide and the total paved width is approximately 70 feet.

- 7th Street – 7th Street is a designated Avenue II running east-west approximately 700 feet north of the Project Site. It provides one lane in each direction and on-street metered parking. There is no center left-turn lane, but there are left-turn pockets at some intersections. Inside lanes are generally 10 feet wide and the total paved width is approximately 56 feet. 7th Street is discontinuous between Mariposa Avenue and Catalina Street.

- 8th Street – 8th Street is a designated Avenue II running east-west adjacent to the north border of the Project Site. It provides two lanes in each direction and on-street metered parking. There is no center left-turn lane, but there are left-turn pockets at some intersections. Inside lanes are generally 10 feet wide and the total paved width is approximately 56 feet.

- James M Wood Boulevard – James M Wood Boulevard, or 9th Street, is a designated Collector Street running east-west approximately 650 feet south of the Project Site. It provides one travel lane in each direction. Unmetered parking is generally available on both sides of the street. The total paved width is approximately 38 feet.

- Normandie Avenue – Normandie Avenue is a designated Avenue III north of Wilshire Boulevard and south of Olympic Boulevard, and a designated local street between 7th Street and Olympic Boulevard. It runs north-south approximately 800 feet west of the Project Site. It diverges from Irolo Street north of Olympic Boulevard and continues from Irolo Street north of Wilshire Boulevard. It provides four travel lanes, with left-turn lanes at intersections, north of Wilshire Boulevard. Two-hour metered and unmetered parking is generally available, with unmetered morning peak period restrictions on the west side of the street and metered afternoon peak period restrictions on the east side of the street. Inside lanes are generally 10 feet wide and the total paved width is approximately 40 feet where it is an Avenue III and 28 feet where it is a local street.

- Irolo Street – Irolo Street is a designated Avenue III running north-south approximately 800 feet to the west of the Project Site between Wilshire Boulevard and Olympic Boulevard. It generally provides one travel lane in each direction (two lanes in each direction between 7th Street and Wilshire Boulevard). Metered and unmetered parking is generally available, with unmetered morning peak period restrictions on the west side of the street and metered afternoon peak period restrictions on the east side of the street. Its width varies from approximately 60 feet at Wilshire Boulevard (where it runs into Normandie Avenue) to about 40 feet south of 7th Street.

- Mariposa Avenue – Mariposa Avenue is a designated Local Street running north-south adjacent to the west border of the Project Site. It provides one travel lane in each

direction, with unmetered parking available on both sides of the street. The total paved width is generally 38 feet, but it narrows to approximately 30 feet between 8th Street and James M. Woods Boulevard.

- Catalina Street – Catalina Street is a designated Local Street running north-south approximately 850 feet east of the Project site. It provides one travel lane in each direction and unmetered parking on both sides of the street. The total paved width is approximately 38 feet.

- Vermont Avenue – Vermont Avenue is a designated Avenue I running north-south approximately 0.4 miles east of the Project Site. It generally provides four travel lanes, with left-turn lanes at intersections. One and two-hour metered parking with peak hour restrictions is generally available on the west side of the street and one-hour metered and unmetered parking with peak hour restrictions is generally available on the east side of the street. Inside lanes are generally 10 feet wide and the total paved width is approximately 60 feet.

EXISTING TRANSIT SYSTEM

The Project area is served by bus and rail lines operated by Metro, LADOT Downtown Area Shuttle (DASH), and Foothill Transit. Figure 3 illustrates the existing transit service in the Study Area. The following provides a brief description of the bus lines providing service in the Project vicinity:

- Metro Local 20 – Route 20 is a local line that travels from downtown Los Angeles to Santa Monica via Wilshire Boulevard and provides service to Koreatown, Westwood, and the Metro Purple Line. It has average headways of nine to 14 minutes during the weekday morning and afternoon peak periods and travels along Wilshire Boulevard within the Study Area.

- Metro Local 51 – Route 51 is a local line that travels from Koreatown to downtown Los Angeles and Compton via Avalon Boulevard and provides service to West Lake and South Park. It has average headways of seven to 10 minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- Metro Local 52 – Route 52 is a local line that travels from Koreatown to downtown Los Angeles and Carson via Avalon Boulevard and provides service to West Lake and South Park. It has average headways of seven to 10 minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- Metro Local 66 – Route 66 is a local bus line that travels from Montebello to Wilshire Center via 6th Street and Olympic Boulevard. This line provides service to Koreatown, downtown Los Angeles, West Lake, Boyle Heights, East Los Angeles, Commerce and

Montebello. It has average headways of seven to 16 minutes during the weekday morning and afternoon peak periods and travels along 8th Street within the Study Area.

- Metro Local 201 – Route 201 is a local line that travels from Glendale to Koreatown via Silver Lake Boulevard and provides service to Silver Lake and Atwater Village. It has average headways of 48 to 60 minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- Metro Local 204 – Route 204 is a local line that travels from Hollywood to Athens via Vermont Avenue and provides service to Koreatown, Exposition Park, and South Los Angeles. It has average headways of 10 to 12 minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- Metro Local 206 – Route 206 is a local line that travels from Hollywood to Athens via Normandie Avenue and provides service to Koreatown. It has average headways of 11 to 13 minutes during the weekday morning and afternoon peak periods and travels along Irolo Street within the Study Area.

- Metro Limited 351 – Route 351 is a limited line that runs from Koreatown to downtown Los Angeles and Compton via Avalon Boulevard and provides service to West Lake and South Park. It has average headways of seven to 10 minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- Metro Rapid 720 – Route 720 is a rapid line that travels from East Los Angeles to Santa Monica via Wilshire Boulevard and Whittier Boulevard and provides service to Boyle Heights, downtown Los Angeles, Koreatown, Beverly Hills, Westwood, Brentwood, and Santa Monica. It has average headways of three to 10 minutes during the weekday morning and afternoon peak periods and travels along Wilshire Boulevard within the Study Area.

- Metro Rapid 754 – Route 754 is a rapid line that travels from Hollywood to Athens via Vermont Avenue and provides service to Koreatown, Exposition Park, and South Los Angeles. It has average headways of three to six to seven minutes during the weekday morning and afternoon peak periods and travels along Vermont Avenue within the Study Area.

- DASH Wilshire Center/Koreatown – DASH Wilshire Center/Koreatown is a local line that travels in a loop through Wilshire Center/Koreatown. It generally travels on 3rd Street and 1st Street, Vermont Avenue, James M Wood Boulevard (9th Street), and Western Avenue, with average headways of 20 minutes during the weekday morning and afternoon peak periods. It provides a direct connection to the Metro Purple Line Wilshire/Western Station and Metro Purple Line and Metro Red Line Wilshire/Vermont Station. DASH Wilshire Center/Koreatown is currently undergoing Phase II of LADOT Transit Services Analysis, which includes a modified route and extended weekday hours. The current route travels along Vermont Avenue and James M Wood Boulevard and the proposed route will travel along 8th Street in the vicinity of the Project Site.

- Foothill Transit 481 – Line 481 is a local line that travels from El Monte to downtown Los Angeles and provides service to Monterey Park, downtown Los Angeles, and

Koreatown. It has average headways of 15 minutes in the westbound direction during the weekday morning peak period and 18 minutes in the eastbound direction during the afternoon peak period and travels along Wilshire Boulevard within the Study Area.

In addition to the bus lines that provide service within the Project Site vicinity, the Metro Purple Line subway has stations at the study intersections of Normandie Avenue/Irolo Street & Wilshire Boulevard (Intersection #1) and Wilshire Boulevard & Vermont Avenue (Intersection #3). The Metro Purple Line runs every 10 minutes to downtown Los Angeles, connecting with the Metro Blue Line and Metro Expo Line in downtown Los Angeles, and the Metro Gold Line at Union Station. The Metro Red Line also runs within the vicinity of the Project Site, with a station at the study intersection of Wilshire Boulevard & Vermont Avenue (Intersection #3).

Table 3 summarizes the transit lines operating in the vicinity of the Project Site. It shows the routes organized by service providers, the type of service (peak vs. off-peak, rapid vs. local), and frequency of service, as described above. The average headways during the peak hour were estimated using detailed trip and ridership data from November 2016 provided by Metro.

Tables 4A and 4B summarize the total available capacity of the Metro and DASH bus system during the morning and afternoon peak hours, respectively, based on the frequency of service of each line, the standing capacity of each bus, and the average peak hour load in each direction. As shown in Tables 4A and 4B, the Metro bus lines within 0.25 miles walking distance of the Project Site currently have available capacity for approximately 728 additional riders during the morning peak hour and 663 riders during the afternoon peak hour. No data was readily available for the DASH transit system. The transit lines with bus stops or stations located more than 0.25 miles from the Project Site were not included.

BICYCLE AND PEDESTRIAN NETWORK

Based on *2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element* (Los Angeles Department of City Planning, adopted March 1, 2011) (2010 Bicycle Plan), the City's bicycle system consists of a limited coverage of bicycle lanes (Class II) and bicycle routes (Class III). Bicycle lanes are a component of street design with dedicated striping, separating

vehicular traffic from bicycle traffic. These facilities offer a safer environment for both cyclists and motorists. Bicycle routes are identified as bicycle-friendly streets where motorists and cyclists share the roadway and there is no dedicated striping of a bicycle lane. Bicycle routes are preferably located on collector and lower volume arterial streets.

Within the study area, 7th Street has bicycle lanes east of Catalina Street. No other bicycle facilities, dedicated or shared, are provided within the Study Area.

The walkability of existing facilities for pedestrians is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile. These attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses and cultural facilities adjacent to residential neighborhoods of the Wilshire Center/Koreatown community, the walkability of the Study Area is approximately 92 points[1]; this compares to the citywide score of 67 points, indicating that the Study Area is substantially more walkable than average within the City.

The sidewalks that serve as routes to the Project Site provide proper connectivity and adequate widths for a comfortable and safe pedestrian environment. The sidewalks provide connectivity to pedestrian crossings at intersections within the Study Area. Striped crosswalks are provided at all legs of the signalized study intersections. The unsignalized intersection (Intersection #10, Mariposa Avenue & James M Wood Boulevard) does not provide striped crosswalks.

VISION ZERO

As described in *Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025* (City of Los Angeles, August 2015), Vision Zero is a traffic safety policy that promotes strategies to eliminate collisions that result in severe injury or death. Vision Zero has identified the High Injury Network, a network of streets based on the collision data from the last five years, where strategic investments will have the biggest impact in reducing death and severe injury.

[1] WalkScore.com rates the Project Site with a score of 92 of 100 possible points (scores accessed in June 2017 for the Wilshire Center/Koreatown community). Walk Score calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

Within the Study Area, the following streets have been identified in the High Injury Network:

- Wilshire Boulevard
- 8th Street
- Irolo Street
- Kenmore Avenue (between Mariposa Avenue and Catalina Street)
- Vermont Avenue

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

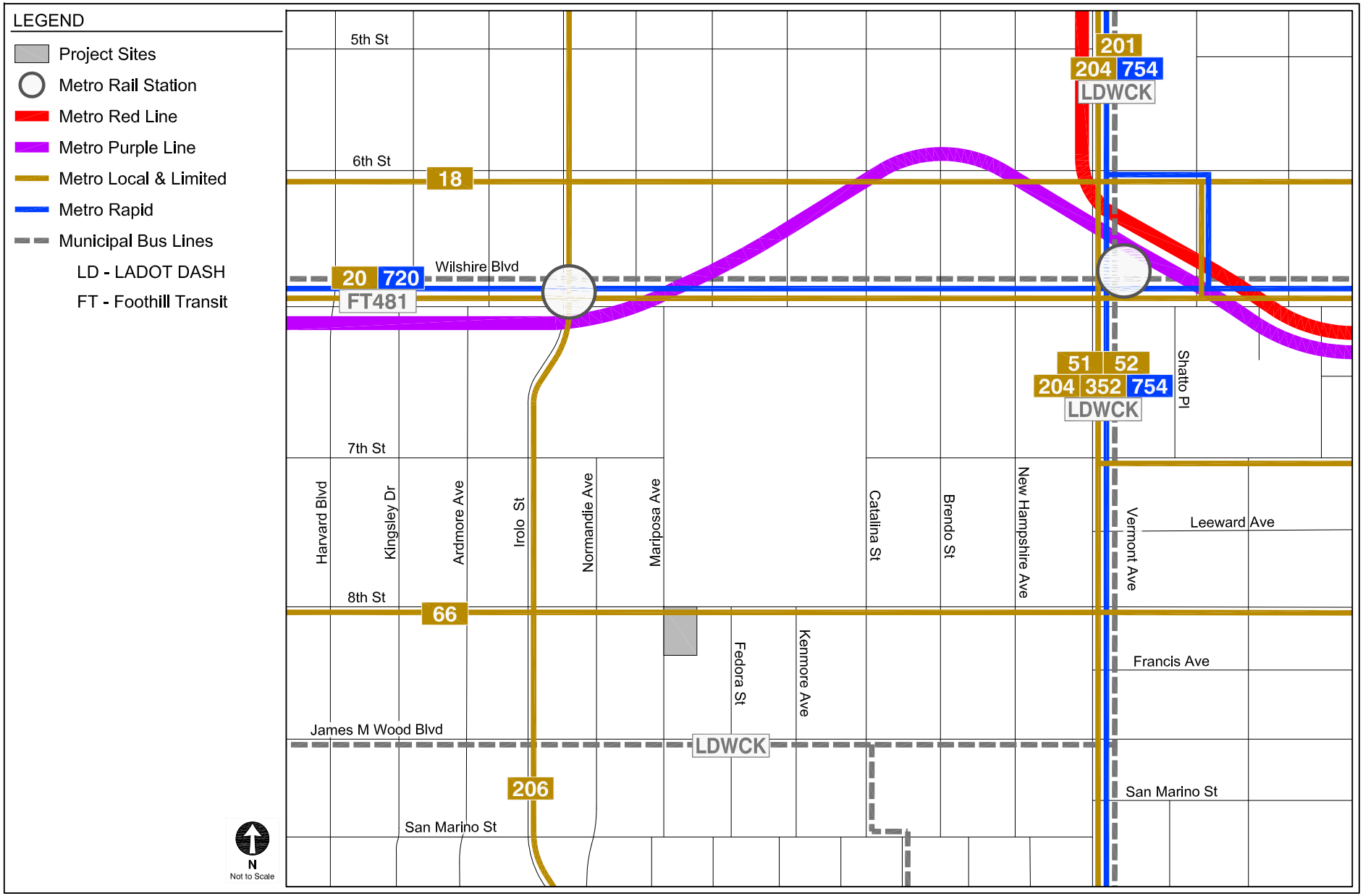
This section presents the existing peak hour turning movement traffic volumes for the intersections analyzed in the study, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each intersection indicating V/C ratios or delay and LOS.

Existing Traffic Volumes

Intersection turning movement counts were conducted at the 10 study intersections during the weekday morning and afternoon peak periods in June 2017, November 2016, April 2016, and November 2015. Traffic counts collected prior to Year 2017 were increased by 1% per year to represent Year 2017 conditions. The existing intersection peak hour traffic volumes are illustrated in Figure 4. Traffic count worksheets are provided in Appendix C.

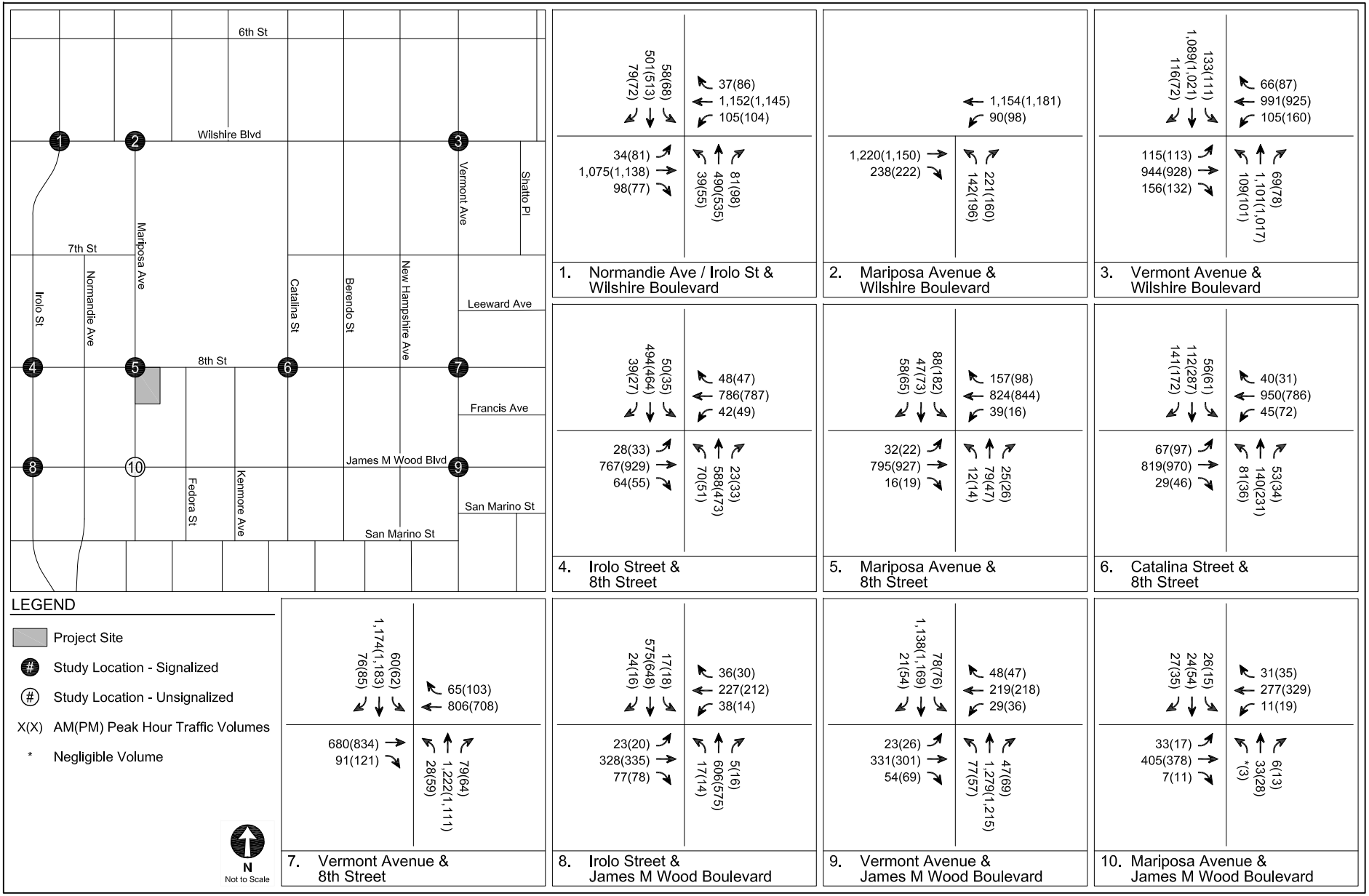
Existing Intersection Levels of Service

Table 5 summarizes the weekday morning and afternoon peak hour LOS results for each of the study intersections under Existing Conditions. As shown, all 10 study intersections currently operate at LOS D or better during both the morning and afternoon peak hours.



PUBLIC TRANSIT SERVING PROJECT SITE

FIGURE 3



EXISTING CONDITIONS (YEAR 2017)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 4

TABLE 3
EXISTING TRANSIT SERVICE IN STUDY AREA

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes) [a]			
				Morning Peak Period		Afternoon Peak Period	
				NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus Service							
20	Downtown Los Angeles to Santa Monica via Wilshire Boulevard	Local	24 Hour	14	10	9	12
51/52 351	Koreatown to Carson / Compton via Avalon Bl	Local/ Limited	4:30 A.M. - 12:30 A.M.	10	10	9	7
66	Downtown Los Angeles/Montebello to Wilshire Center via 8th Street & Olympic Boulevard	Local	4:30 A.M. - 1:30 A.M.	7	15	16	9
201	Glendale to Koreatown via Silver Lake Boulevard	Local	5:30 A.M. - 8:45 P.M.	48	48	60	48
204	Hollywood to Athens via Vermont Avenue	Local	24 Hrs	11	12	11	10
206	Hollywood to Athens via Normandie Avenue	Local	4:45 A.M. - 1:30 A.M.	12	13	12	11
720	Downtown Los Angeles / Commerce to Santa Monica via Wilshire Boulevard & Whittier Boulevard	Rapid	4:00 A.M - 2:30 A.M.	10	3	4	9
754	Hollywood to Athens via Vermont Avenue	Rapid	5:30 A.M. - 9:15 A.M.	7	6	7	6
LADOT DASH Bus Service							
WCK	Wilshire Center to Koreatown	Local	7:00 A.M. - 7:15 P.M.	20	20	20	20
Foothill Transit Bus Service							
481	El Monte to Downtown Los Angeles / Koreatown via I-10, I-110, & Wilshire Boulevard	Express	5:30 A.M. - 6:30 P.M.	N/A	15	18	N/A
Metro Rail Service							
Red	Downtown Los Angeles to North Hollywood	Rail	4:30 A.M. - 1:30 A.M.	10	10	10	10
Purple	Downtown Los Angeles to Western & Wilshire	Rail	4:30 A.M. - 1:30 A.M.	12	12	12	12

Notes

Metro: Los Angeles County Metropolitan Transportation Authority; LADOT DASH: Los Angeles Department of Transportation Downtown Area Shuttle.
Morning Peak Period from 6:00 AM to 10:00 AM; Afternoon Peak Period from 3:00 PM to 7:00 PM.
[a] Average headways are based on the total number of trips during the peak period as indicated in Metro ridership data from November, 2016.

TABLE 4A
TRANSIT SYSTEM CAPACITY IN STUDY AREA - MORNING PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus Service										
66	Downtown Los Angeles/Montebello to Wilshire Center via 8th Street & Olympic Boulevard	50	28	18	23	14	27	36	238	143
204	Hollywood to Athens via Vermont Avenue	50	57	27	47	22	4	28	19	139
206	Hollywood to Athens via Normandie Avenue	50	43	28	37	24	13	26	65	125
LADOT DASH										
WCK	Wilshire Center/Koreatown	30	*Data currently not available*							
								Total Bus System Capacity	**728**	

Notes

Metro: Los Angeles County Metropolitan Transportation Authority.

[a] Capacity assumptions:

Metro Bus - 40 seated / 50 standing.

LADOT DASH - 25 seated / 30 seated and standing.

[b] Ridership information based on data from Metro for November 2016.

TABLE 4B
TRANSIT SYSTEM CAPACITY IN STUDY AREA - AFTERNOON PEAK HOUR

Provider, Route, and Service Area		Capacity per Trip [a]	Peak Hour Ridership [b]				Average Remaining Capacity per Trip		Remaining Peak Hour Capacity	
			Peak Load		Average Load					
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro Bus Service										
66	Downtown Los Angeles/Montebello to Wilshire Center via 8th Street & Olympic Boulevard	50	26	27	22	22	28	28	105	187
204	Hollywood to Athens via Vermont Avenue	50	40	51	30	41	20	9	105	55
206	Hollywood to Athens via Normandie Avenue	50	30	47	23	36	27	14	134	77
LADOT DASH										
WCK	Wilshire Center/Koreatown	30	*Data currently not available*							
								Total Bus System Capacity	**663**	

Notes

Metro: Los Angeles County Metropolitan Transportation Authority.

[a] Capacity assumptions:

Metro Bus - 40 seated / 50 standing.

LADOT DASH - 25 seated / 30 seated and standing.

[b] Ridership information based on data from Metro for November 2016.

TABLE 5
EXISTING CONDITIONS (YEAR 2017)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions	
Signalized Intersections			**V/C Ratio**	**LOS**
1.	Normandie Avenue / Irolo Street & Wilshire Boulevard	A.M. P.M.	0.595 0.687	A B
2.	Mariposa Avenue & Wilshire Boulevard	A.M. P.M.	0.484 0.479	A A
3.	Vermont Avenue & Wilshire Boulevard	A.M. P.M.	0.820 0.799	D C
4.	Irolo Street & 8th Street	A.M. P.M.	0.740 0.699	C B
5.	Mariposa Avenue & 8th Street	A.M. P.M.	0.437 0.478	A A
6.	Catalina Street & 8th Street	A.M. P.M.	0.535 0.657	A B
7.	Vermont Avenue & 8th Street	A.M. P.M.	0.665 0.681	B B
8.	Irolo Street & James M Wood Boulevard	A.M. P.M.	0.641 0.662	B B
9.	Vermont Avenue & James M Wood Boulevard	A.M. P.M.	0.685 0.667	B B
Unsignalized Intersection			**Delay**	**LOS**
10.	Mariposa Avenue & James M Wood Boulevard	A.M. P.M.	21.4 22.9	C C

Chapter 3

Future without Project Conditions

Estimates of future traffic conditions both with and without the Project, representing cumulative conditions, were developed to evaluate the potential impacts of the Project on the local street system. This discussion details the assumptions used to develop the Future without Project Conditions in Year 2022, which corresponds to the anticipated Project buildout year.

The existing traffic volumes were factored by an annual ambient growth rate to approximate regional growth and development. In addition to the ambient growth, for purposes of providing a conservative analysis of potential cumulative traffic impacts, the traffic generated by proposed, approved, and under construction projects in and around the Study Area was also added to estimate the Future without Project Conditions.

AMBIENT TRAFFIC GROWTH

Traffic levels are expected to increase over time as a result of regional growth and development in and around the Study Area. The CMP provides general growth factors based on regional modeling. As shown in Exhibit D-1 of the CMP, the Central Los Angeles area is estimated to experience a total regional growth in traffic of 0.70% between the years of 2015 and 2020, which equates to annual growth of approximately 0.15% per year. However, based on discussions with LADOT through the MOU process, an ambient growth factor of 1% per year compounded annually was used to adjust the existing traffic volumes to reflect the effects of the regional growth and development by Year 2022. The total adjustment applied over the five-year period from 2017 to 2022 was 5.10%. Therefore, the ambient growth rate of 1% per year more than accounts for the projected growth from the CMP. This growth factor conservatively accounts for increases in traffic due to potential projects not yet proposed or projects outside the Study Area.

RELATED PROJECTS

This study also considers growth in traffic due to other projects proposed, approved, or under construction in and around the Study Area, known as the Related Projects. The list of Related Projects is based on information provided by the Department of City Planning and LADOT, as well as recent studies of projects in the area. The 76 Related Projects are detailed in Table 6 and shown in Figure 5 and include all projects within a 1.0 mile radius of the Project Site.

The development of estimated traffic volumes added to the Study Area as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

Trip Generation

Trip generation estimates for the Related Projects were provided by LADOT or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012). Table 6 summarizes the Related Project trip generation for typical weekdays, including daily trips, morning peak hour trips, and afternoon peak hour trips. These projections are very conservative in that they do not in every case account for either the trips generated by the existing uses to be removed or the likely use of other travel modes (transit, bicycle, walk, etc.) Further, they do not fully account for the internal capture trips within a multi-use development, nor the interaction of trips between multiple Related Projects within the Wilshire Center/Koreatown area, in which one Related Project serves as the origin for a trip destined for another Related Project.

Trip Distribution

The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the proposed developments are drawn, and the location of these projects in relation to the

surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Trip Assignment

The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution patterns developed above. Figure 6 shows the peak hour traffic volumes associated with these Related Projects at the study intersections. These volumes were then added to the existing traffic volumes after adjustment for ambient growth through the projected buildout year of 2022. As discussed above, this is a conservative approach as many of the Related Projects may be reflected in the ambient growth rate. These volumes represent the Future without Project Conditions (i.e., existing traffic volumes added to ambient traffic growth and Related Project traffic growth) and are shown in Figure 7 for the 10 study intersections.

FUTURE INFRASTRUCTURE IMPROVEMENTS

The roadway network for the Future without Project Conditions within the Study Area could also be affected by regional improvement plans, local specific plans, and programmed improvements (i.e., mitigations for Related Projects). However, upon consultation with LADOT, it was determined that the analysis should conservatively exclude potential improvements within the Study Area because of uncertainty as to the likelihood and timing of their implementation. Therefore, the lane configurations and signal phasing at the study intersections was assumed to remain unchanged between Existing and Future Conditions. However, the potential improvements that were identified are discussed below.

City Bicycle Plan

The 2010 Bicycle Plan identifies the City's vision for a more integrated bicycle network throughout the City, including within the Study Area. It proposes new bicycle lanes on Wilshire Boulevard and bicycle friendly streets on 8th Street, James M Wood Boulevard, San Marino

Street, and New Hampshire Avenue throughout the Study Area. Upon consultation with LADOT's bicycle section, no changes to vehicular lane configurations as a result of potential new bicycle lanes were assumed in this analysis.

Mobility Plan 2035

In Mobility Plan 2035, the City identifies key corridors as components of various "mobility-enhanced networks." Each network is intended to focus on improving a particular aspect of urban mobility, including transit, neighborhood connectivity, bicycles, pedestrians, and vehicles. The specific improvements that may be implemented in those networks have not yet been identified and there is no schedule for implementation; therefore, no changes to vehicular lane configurations were made as a result of Mobility Plan 2035. However, the following mobility-enhanced networks included corridors within the Study Area:

- Transit Enhanced Network (TEN): The following corridors were identified as part of the TEN:
    - Wilshire Boulevard (Comprehensive Transit Enhanced)
    - Vermont Avenue (Comprehensive Transit Enhanced)

- Neighborhood Enhanced Network (NEN): The following corridors were identified as part of the NEN:
    - 7th Street west of New Hampshire Avenue
    - 8th Street between Mariposa Avenue and New Hampshire Avenue
    - James M Wood Boulevard
    - Mariposa Avenue between 7th Street and 8th Street
    - Catalina Street south of 7th Street
    - New Hampshire Avenue

- Bicycle Enhanced Network (BEN) / Bicycle Lane Network (BLN): 7th Street east of New Hampshire Avenue is striped with protective bicycle lanes, and Wilshire Boulevard and Vermont Avenue were identified as part of the BLN.

- Vehicle Enhanced Network: No streets in the Study Area were identified as part of the Vehicle Enhanced Network.

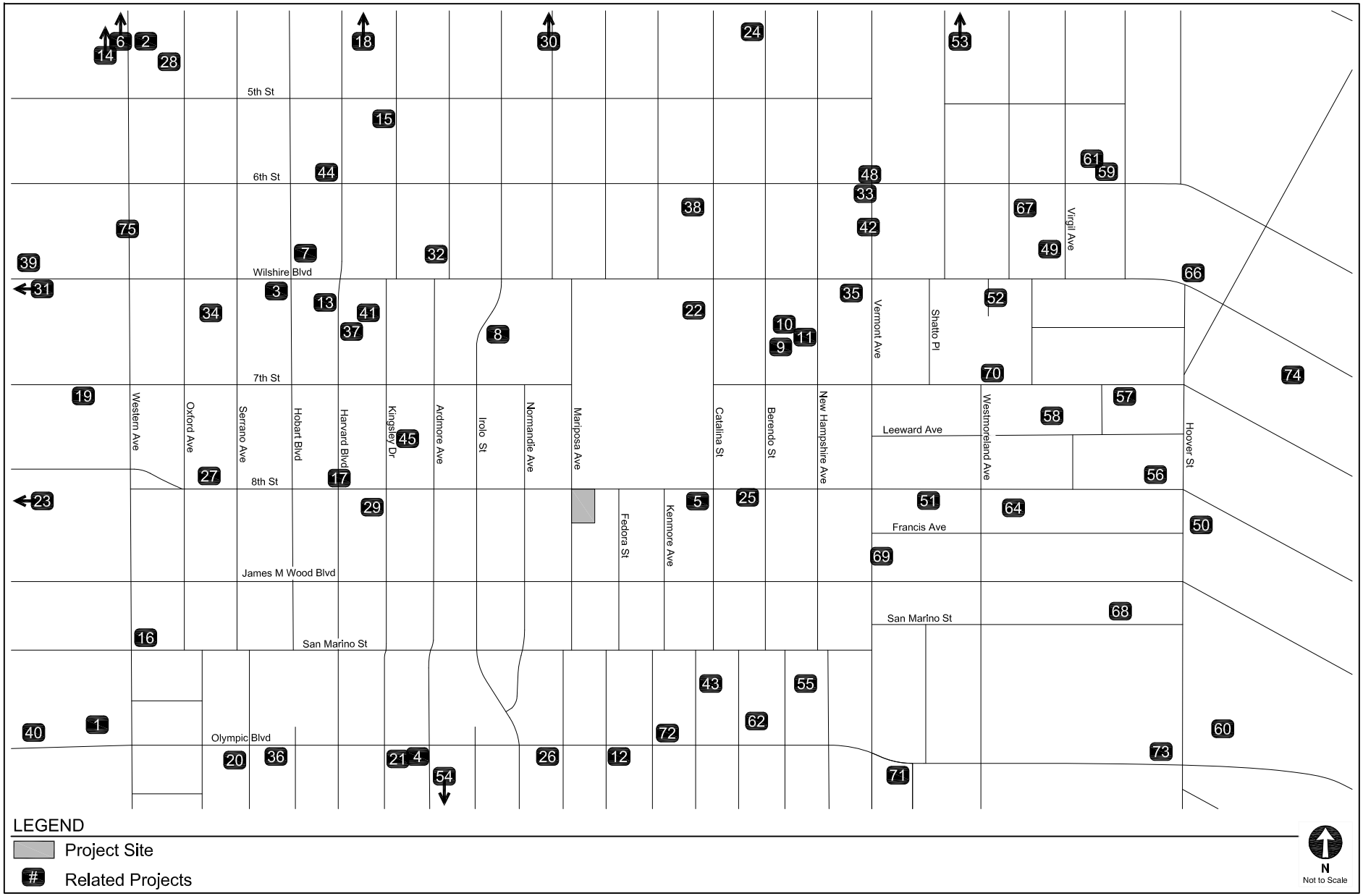
- Pedestrian Segment Analysis: The following corridors were identified as part of the Pedestrian Segment Analysis:

- Wilshire Boulevard
- 7th Street
- 8th Street
- Irolo Street/Normandie Avenue
- Vermont Avenue

FUTURE WITHOUT PROJECT INTERSECTION LEVELS OF SERVICE

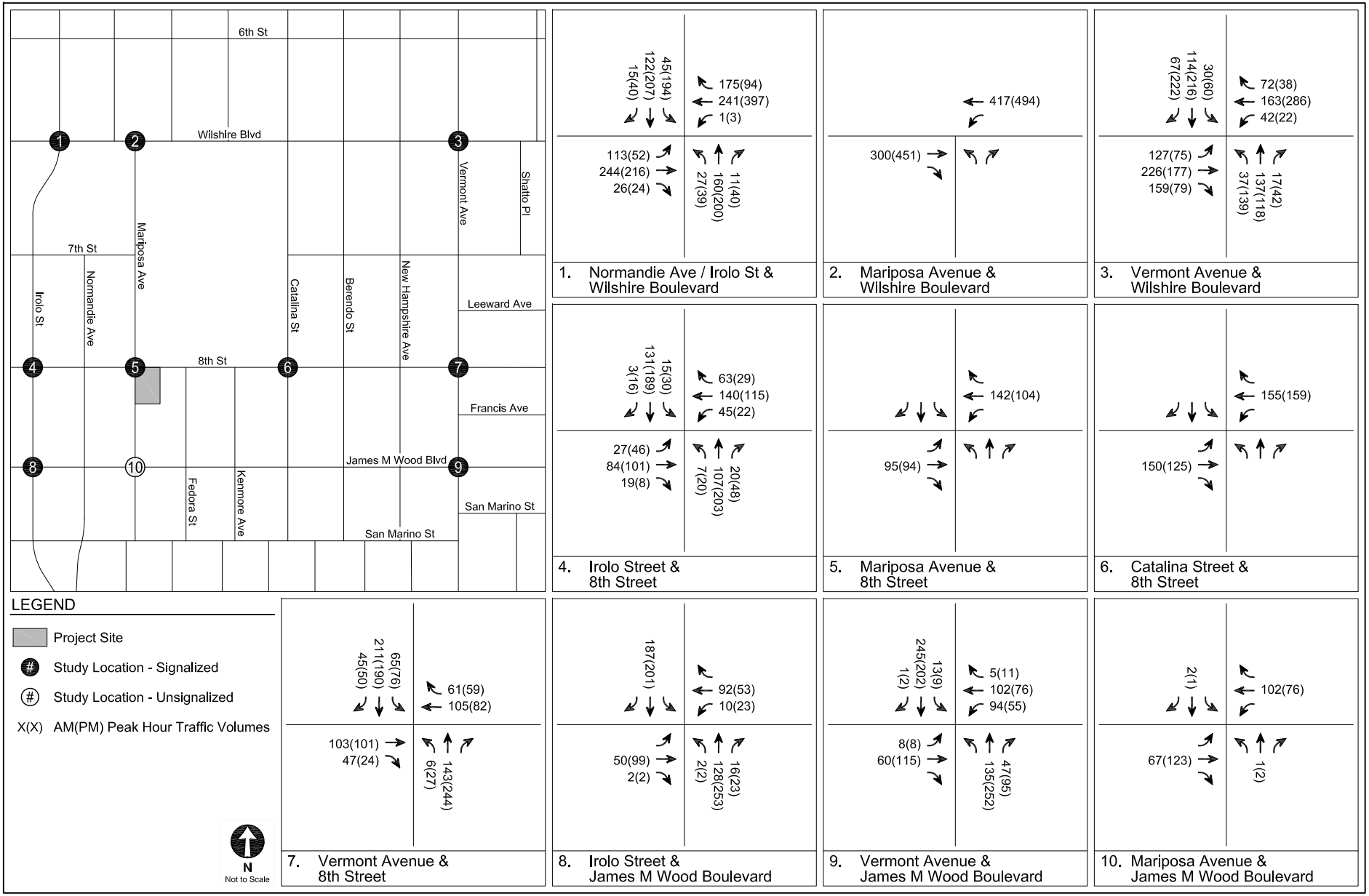
Table 7 summarizes the weekday morning and afternoon peak hour LOS results for each of the study intersections under Future without Project Conditions. Table 7 indicates that four of the 10 study intersections are projected to operate at LOS D or better during both the weekday morning and afternoon peak hours. The remaining six intersections are projected to operate at LOS E or F during at least one of the analyzed peak hours:

- Intersection #1, Normandie Avenue/Irolo Street & Wilshire Boulevard (LOS E during the morning peak hour and LOS F during afternoon peak hour)
- Intersection #3, Vermont Avenue & Wilshire Boulevard (LOS F during both peak hours)
- Intersection #4, Irolo Street & 8th Street (LOS F during both peak hours)
- Intersection #8, Irolo Street & James M Wood Boulevard (LOS E during the afternoon peak hour)
- Intersection #9, Vermont Avenue & James M Wood Boulevard (LOS E during both peak hours)
- Intersection #10, Mariposa Avenue & James M Wood Boulevard (LOS E during the afternoon peak hour)



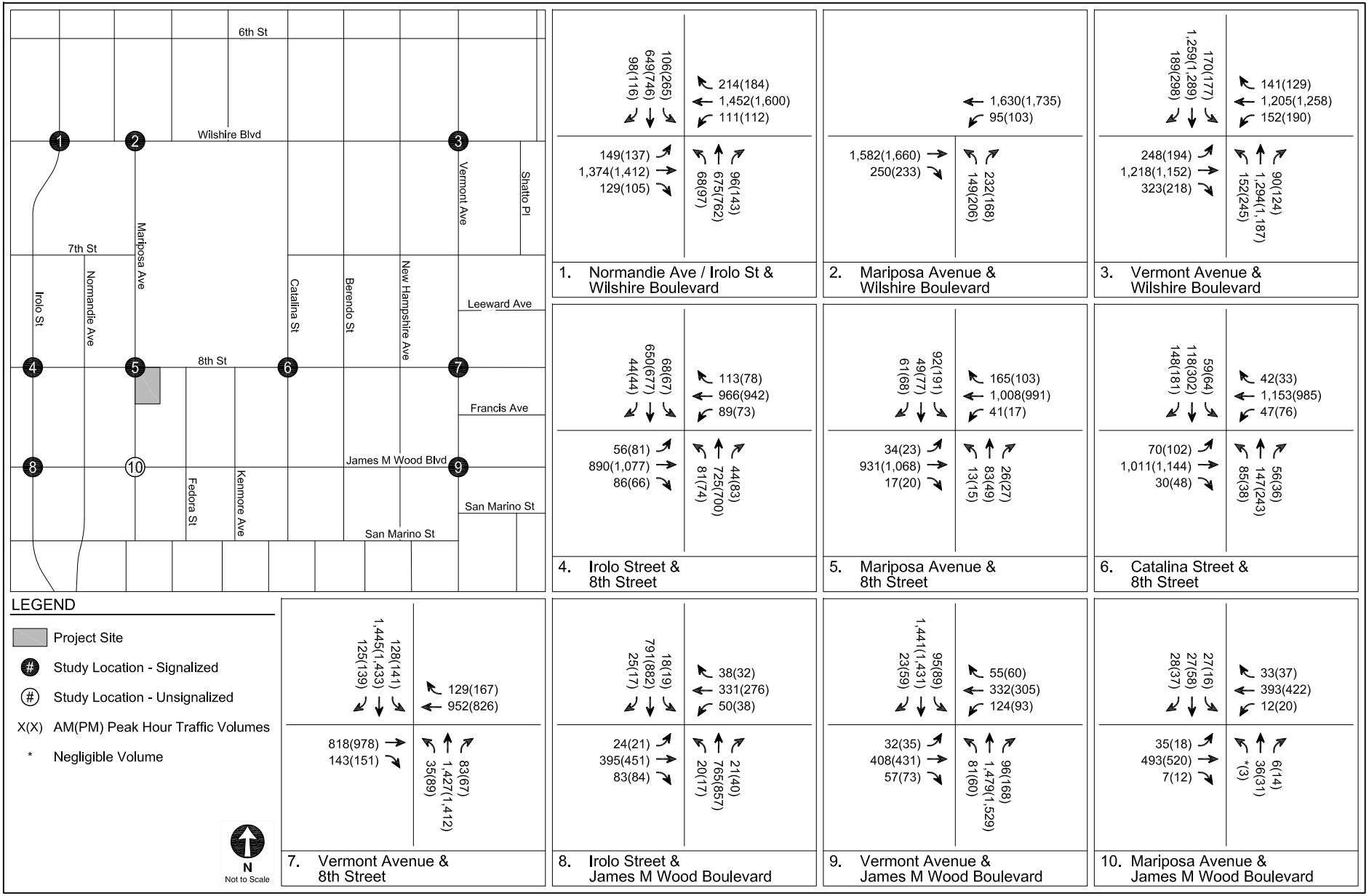
LOCATIONS OF RELATED PROJECTS

FIGURE 5



RELATED PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
6



FUTURE WITHOUT PROJECT (YEAR 2022)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 7

TABLE 6
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
1.	Office & Apartments	3323 W Olympic Blvd	40 apartment units and 277,720 sf office	1,267	57	30	87	44	82	126
2.	Gaju Marketplace (The "G")	450 S Western Ave	130,500 sf retail market	3,019	47	29	76	138	138	276
3.	Mixed-Use	3670 W Wilshire Blvd	378 condominium units and 8,000 sf commercial	2,480	55	142	197	144	76	220
4.	Shopping Center / Mixed-Use	3060 W Olympic Blvd	109,006 sf retail	4,134	60	26	86	169	191	360
5.	Mixed-Use	805 S Catalina St	224 condominium units and 7,000 sf retail	1,935	24	119	143	110	57	167
6.	Western Galleria Market	100 N Western Ave	98 apartment units and 30,000 sf retail	940	17	40	57	54	38	92
7.	Wilshire Temple Master Plan	3663 W Wilshire Blvd	School and office improvements	825	94	44	138	20	3	23
8.	Health Club	3470 W Wilshire Blvd	20,178 sf health club	231	-13	6	-7	22	-1	21
9.	Berendo Apartments (688)	688 S Berendo St	136 apartment units	678	10	42	52	41	22	63
10.	Berendo Apartments (680)	680 S Berendo St	174 apartment units	1,000	15	61	76	61	32	93
11.	Apartment Project	685 S New Hampshire Ave	177 apartment units	1,000	15	61	76	61	32	93
12.	1020 Fedora Street Hotel	1020 S Fedora St	86-room hotel	616	28	14	42	23	21	44
13.	Residential	3640 W Wilshire Blvd	209 apartment units	1,182	18	72	90	73	40	113
14.	Restaurants	135 N Western Ave	11,904 sf restaurants	457	2	2	4	25	13	38

TABLE 6 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
15.	Apartment Project	535 S Kingsley Dr	85 apartment units	543	8	31	39	36	19	55
16.	Mixed-Use	940 S Western Ave	81 apartment units and 8,000 sf retail	380	6	31	37	26	11	37
17.	Apartment Project	800 S Harvard Blvd	113 apartment units and 7,000 sf retail	827	14	32	46	44	33	77
18.	Hotel and Retail	4110 W 3rd St	173-room hotel and 2,780 sf retail	1,185	45	35	80	46	40	86
19.	Mixed-Use	700 S Manhattan Pl	161 apartment units and 10,000 sf restaurant	1,260	19	57	76	71	46	117
20.	Apartment Project	1011 S Serrano Ave	91 apartment units	545	8	33	41	32	18	50
21.	Mixed-Use	3076 W Olympic Blvd	226 apartment units and 16,000 sf retail	1,567	25	78	103	90	56	146
22.	Apartment Project	3350 W Wilshire Blvd	120 apartment units	728	11	43	54	47	25	72
23.	Apartment Project	850 S Crenshaw Blvd	44 apartment units	293	4	18	22	18	10	28
24.	Apartment Project	427 S Berendo St	85 apartment units	288	5	17	22	17	10	27
25.	Mixed-Use	3100 W 8th St	100 apartment units and 9,496 sf retail	100	10	41	51	29	33	62
26.	Apartment Project	1017 S Mariposa Ave	79 apartment units	373	5	23	28	23	12	35
27.	Apartment Project	411 S Normandie Ave	224 apartment units	1,407	22	86	108	87	47	134
28.	Mixed-Use	3525 W 8th St	367 apartment units, 23,000 sf supermarket, and 16,500 sf retail	1,214	8	121	129	83	25	108

TABLE 6 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
29.	Mixed-Use	4074 W 5th St	119 apartment units and 13,000 sf retail	908	13	44	57	51	32	83
30.	Apartment Project	815 S Kingsley Dr	90 apartment units	521	7	32	39	30	18	48
31.	Postpartum Extended Care and Retail	257 S Mariposa Ave	140 apartment units for postpartum care and 3,490 sf retail	1,036	14	58	72	61	33	94
32.	Mixed-Use	3986 W Wilshire Blvd	228 apartment units, 5,000 sf coffee shop, 5,000 sf restaurant, and 12,000 sf retail	1,354	100	-23	77	124	-77	47
33.	Mixed-Use	3545 W Wilshire Blvd	433 apartment units and 49,849 sf retail	917	-42	83	41	84	10	94
34.	Mixed-Use	605 S Vermont Ave	103 apartment units and 30,937 sf museum	755	17	39	56	42	37	79
35.	Mixed-Use	3700 W Wilshire Blvd	506 condominium units, 40,323 sf retail, and 21,712 sf restaurant	3,500	49	152	201	178	80	258
36.	Mixed-Use	3240 W Wilshire Blvd	162-room hotel and 545 apartment units	1,353	15	173	188	89	23	112
37.	Mixed-Use	3170 W Olympic Blvd	252 apartment units and 32,300 sf retail	1,624	24	89	113	94	56	150
38.	Harvard Boulevard Hotel	679 S Harvard Blvd	110-room hotel and 1,000 sf commercial space	778	29	20	49	30	27	57
39.	The Nest on Catalina	621 S Catalina St	165 apartment units, 8,000 sf retail, 15,000 sf nightclub, and 15,000 sf hall	2,776	26	55	81	180	95	275
40.	Apartment Project	3875 W Wilshire Blvd	196 apartment units	1,114	17	68	85	69	37	106
41.	Urban Commons Gramercy	3377 W Olympic Blvd	142 assisted living units, 9,246 sf medical office, and 3,179 sf retail	254	12	-3	9	11	25	36
42.	Mixed-Use	3600 W Wilshire Blvd	760 apartment units and 10,670 sf retail	3,264	34	201	235	202	99	301

TABLE 6 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
43.	Wilshire Gate Project	631 S Vermont Ave	200-room hotel, 250 condominium units, 49,227 sf office, and 21,320 sf retail	2,599	95	95	190	115	120	235
44.	Hotel	966 S Dewey Ave	99 hotel rooms	677	28	15	43	24	24	48
45.	Mixed-Use	3751 W 6th St	266-room hotel, 44 apartment units, and 20,000 sf retail	1,182	29	20	49	33	25	58
46.	Apartment Project	748 S Kingsley Dr	67 apartment units	406	6	25	31	24	14	38
47.	Mixed-Use	3323 W Olympic Blvd	208 condominium units and 3,500 sf retail	409	-13	49	36	39	-7	32
48.	Mixed-Use	3986 W Wilshire Blvd	228 apartment units, 12,000 sf retail, 3,500 sf restaurant, and 1,750 sf coffee shop	503	-50	6	-44	53	25	78
49.	Vermont Corridor Development Plan	Vermont Ave & 6th Street	471,000 sf office, 246 apartment units, 72-unit sr. housing, community center, retail	3,215	216	104	320	121	293	414
50.	Mixed-Use	3033 W Wilshire Blvd	189 condominium units and 5,500 sf retail	816	12	49	61	45	29	74
51.	Mixed-Use	820 S Hoover St	32 condominium units and 4,500 sf retail	414	7	15	22	18	14	32
52.	Affordable Housing and Asissted Living	2924 W 8th St	42 affordable apartment units and 43 assisted living units	416	6	17	23	18	10	28
53.	Southwestern Law School Expansion	3050 W Wilshire Blvd	133 student units, 450-seat lecture hall, and 43,400 sf administrative space	-1,337	-35	-16	-51	-45	-52	-97
54.	Camino Nuevo Charter School Relocation	3400 W 3rd St	656-student K-8 charter school	764	146	120	266	43	45	88
55.	15th St Charter School	2755 W 15th St	300 student middle school	486	68	57	125	24	24	48
56.	Church	968 S Berendo St	85,308 sf church	535	23	8	31	3	9	12

TABLE 6 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
57.	Equitas Charter School	2723 W 8th St	450 K-8 students	949	190	155	345	28	37	65
58.	Mixed-Use	2850 W 7th St	206 apartment units and 7,500 sf retail	1,057	20	72	92	72	42	114
59.	Residential project	2929 W Leeward Ave	80 condominium units	476	7	33	40	44	21	65
60.	6th & Virgil	2968 W 6th St	399 apartment units and 20,000 sf commercial space	2,943	73	154	227	168	93	261
61.	Residential Project	1011 S Park View St	108 apartment units	594	9	38	47	38	19	57
62.	Hotel and Restaurant	2965 W 6th St	99-room hotel and 545 sf restaurant addition	688	26	18	44	25	25	50
63.	3-story Retail and Office Building	2789 W Olympic Blvd	20,607 sf retail and 2,781 sf office	612	16	8	24	25	29	54
64.	Apartment Project	1255 E Elden Ave	103 apartment units	376	0	32	32	28	10	38
65.	Apartment Project	2859 W Francis Ave	81 apartment units	492	7	28	35	31	5	36
66.	Mixed-Use	2405 W 8th St	144 apartment units and 4,406 sf retail	333	-20	48	28	42	-15	27
67.	Mixed-Use	2900 W Wilshire Blvd	644 apartment units and 15,500 sf commercial space	3,482	81	135	216	137	81	218
68.	Mixed-Use	616 S Westmoreland Ave	77 apartment units, 2,360 sf restaurant, and 745 sf retail	446	1	30	31	31	5	36
69.	2649 San Marino Apartments	2649 W San Marino Ave	45 apartment units	246	4	15	19	15	8	23
70.	Zion Market	888 S Vermont Ave	4,400 sf office ad 47,208 sf market	2,526	45	19	64	171	169	340

TABLE 6 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
71.	Mixed-Use	2972 W 7th St	304 apartment units and 9,735 sf retail	1,018	17	99	116	76	23	99
72.	Mixed-Use	1000 S Vermont Ave	236 apartment units and 60,300 sf commercial space	2,655	39	94	133	137	102	239
73.	Mixed-Use	2870 W Olympic Blvd	78-room hotel and 16,384 sf retail/restaurant	834	22	14	36	30	28	58
74.	Olympic & Hoover Mixed-Use	2501 W Olympic Blvd	173 apartment units and 36,180 sf comercial space	1,911	27	72	99	100	73	173
75.	Mixed-Use	668 S Coronado St	122 apartment units and 1,182 sf retail	947	14	48	62	56	34	90
76.	Mixed-Use	635 Western Ave	132 apartment units and 900 sf retail	672	10	40	50	40	22	62

Notes:
Source: LADOT, June, 2017.

TABLE 7
FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2022)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions	
Signalized Intersections			**V/C Ratio**	**LOS**
1.	Normandie Avenue / Irolo Street & Wilshire Boulevard	A.M. P.M.	0.939 1.149	E F
2.	Mariposa Avenue & Wilshire Boulevard	A.M. P.M.	0.614 0.659	B B
3.	Vermont Avenue & Wilshire Boulevard	A.M. P.M.	1.088 1.146	F F
4.	Irolo Street & 8th Street	A.M. P.M.	1.028 1.108	F F
5.	Mariposa Avenue & 8th Street	A.M. P.M.	0.512 0.554	A A
6.	Catalina Street & 8th Street	A.M. P.M.	0.619 0.738	B C
7.	Vermont Avenue & 8th Street	A.M. P.M.	0.849 0.864	D D
8.	Irolo Street & James M Wood Boulevard	A.M. P.M.	0.837 0.919	D E
9.	Vermont Avenue & James M Wood Boulevard	A.M. P.M.	0.903 0.947	E E
Unsignalized Intersection			**Delay**	**LOS**
10.	Mariposa Avenue & James M Wood Boulevard	A.M. P.M.	31.4 36.3	D E

Chapter 4
Project Traffic

This chapter describes the assumptions and methodology used in developing the traffic volumes associated with the proposed Project within the Study Area.

PROJECT DESCRIPTION

As described in Chapter 1, the Applicant proposes to construct a seven-level mixed-use building over three levels of subterranean parking. The Project would include a total of eight condominium units, an 80-room hotel, and 7,273 sf of commercial space, including 4,808 sf of ground-floor retail and a 2,465 sf karaoke room in a below-grade level. Additional amenity space, including a bar, fitness center, and business center, would be for hotel guests only. The Project would provide 142 vehicular parking spaces and 32 bicycle parking spaces, including 20 long-term and 12 short-term spaces. Vehicular access to the Project Site would be provided via a full-access driveway on Mariposa Avenue south of 8th Street. The Project Site is currently occupied by a small surface parking lot of approximately 38 spaces and an apartment building with four units. The conceptual Project Site plan is shown in Figure 1.

PROJECT TRIP GENERATION

The number of trips expected to be generated by the Project was estimated using rates published in *Trip Generation, 9th Edition*. These rates are based on surveys of similar land uses at sites around the country and are provided as both daily rates and morning and afternoon peak hour rates. They relate the number of vehicle trips traveling to and from the Project Site to the size of development of each land use.

Appropriate trip generation reductions to account for public transit usage, internal capture, and pass-by trips were made in consultation with LADOT. A 10% transit/walk-in adjustment was made to Project trips in accordance with *Transportation Impact Study Guidelines* for a development within walking distance of multiple public transit options. The retail trip generation was also reduced by a 50% pass-by adjustment (as allowed in *Transportation Impact Study Guidelines)* to account for the estimated trips made by drivers already passing by the Project Site and stopping on their way to another destination. Internal capture adjustments of 5% and 10% were applied to the retail and karaoke uses, respectively, to account for person trips made between distinct land uses within a mixed-use development (e.g., residents and hotel patrons visiting the retail and karaoke uses). Additionally, trips estimated to be generated by the existing four apartment units on the Project Site were credited against the net Project trip generation estimates.

As shown in Table 8, after accounting for the adjustments above, the Project is expected to generate 694 new trips on a typical weekday, including 42 morning peak hour trips (24 inbound trips, 18 outbound trips) and 74 afternoon peak hour trips (42 inbound trips, 32 outbound trips).

PROJECT TRIP DISTRIBUTION

Similar to the trip distribution of traffic for the Related Projects described in Chapter 3, the geographic distribution of trips generated by the Project is dependent on the location of employment, residential, and commercial centers to which residents of and visitors to the Project would be drawn, characteristics of the street system serving the Project Site, the location of the proposed driveway, and existing traffic conditions.

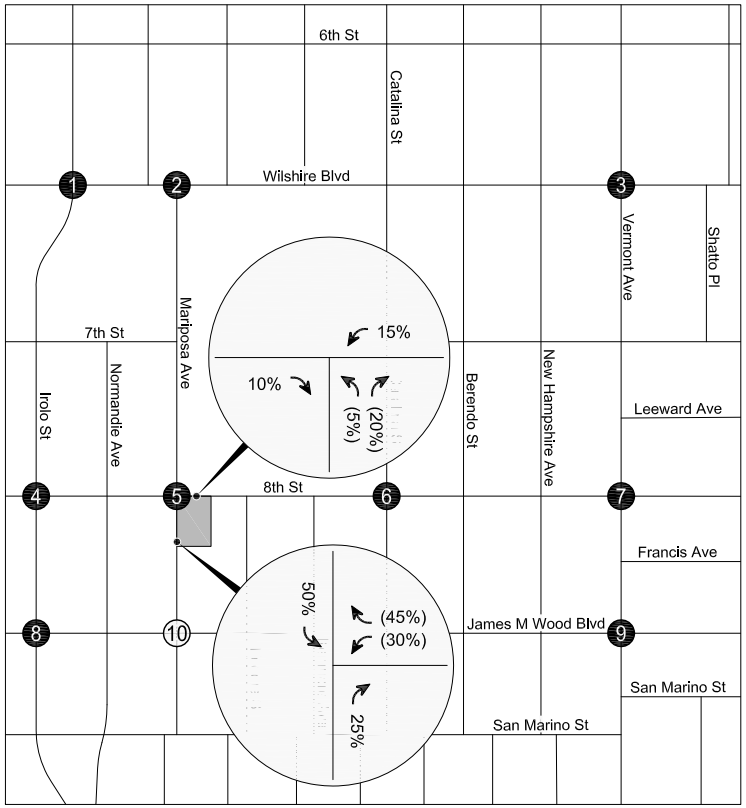
Based on these considerations, traffic entering and exiting the Project was assigned to the surrounding street system. The intersection-level trip distribution pattern for Project traffic at the study intersections is shown in Figure 8. Generally, the pattern is as follows:

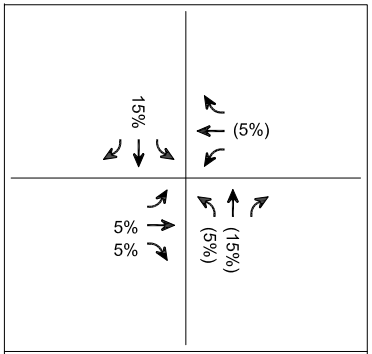
- 25% to/from the north
- 30% to/from the east

- 20% to/from the south
- 25% to/from the west

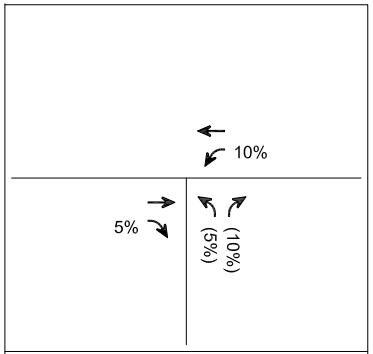
PROJECT TRIP ASSIGNMENT

The Project trip generation estimates summarized in Table 8 and the trip distribution pattern shown in Figure 8 were used to assign the Project-generated traffic through the study intersections. Figure 9 illustrates the net Project-only traffic volumes at the study intersections during typical weekday morning and afternoon peak hours.

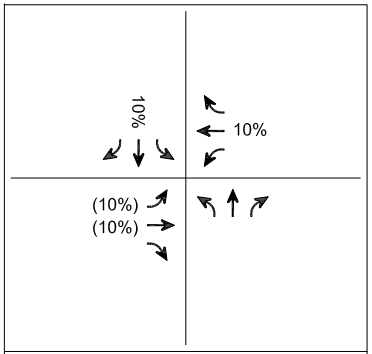




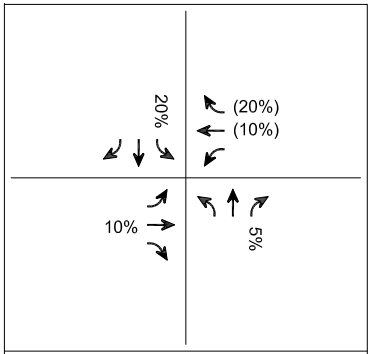
1. Normandie Ave / Irolo St & Wilshire Boulevard



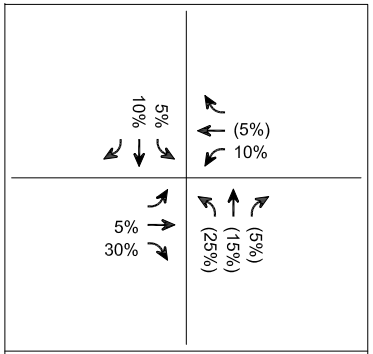
2. Mariposa Avenue & Wilshire Boulevard



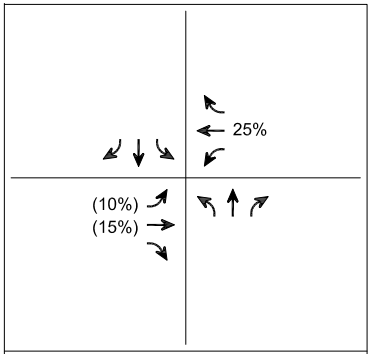
3. Vermont Avenue & Wilshire Boulevard



4. Irolo Street & 8th Street



5. Mariposa Avenue & 8th Street

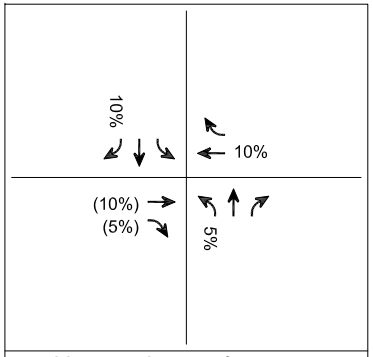


6. Catalina Street & 8th Street

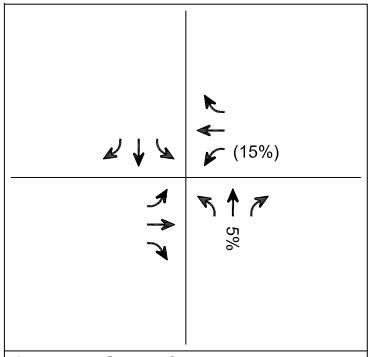
LEGEND

- Project Site
- # Study Location - Signalized
- (#) Study Location - Unsignalized
- %(%) Inbound(Outbound) Trip Percentage
- • Project Driveway

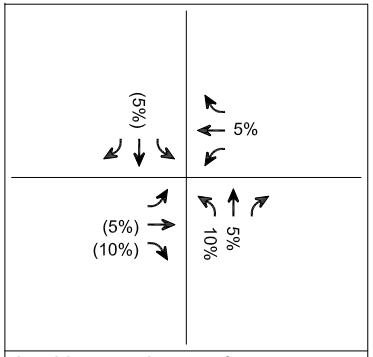
N
Not to Scale



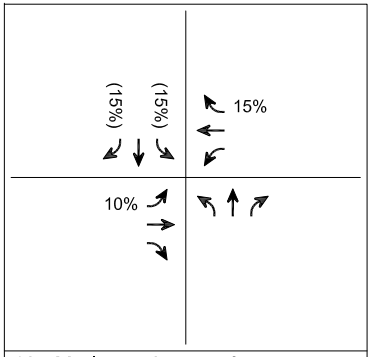
7. Vermont Avenue & 8th Street



8. Irolo Street & James M Wood Boulevard



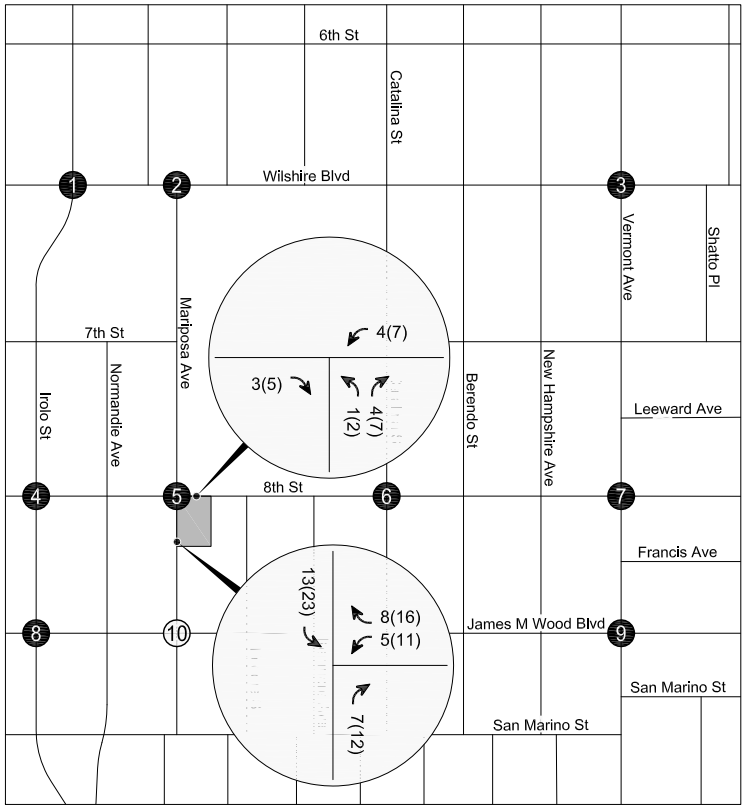
9. Vermont Avenue & James M Wood Boulevard

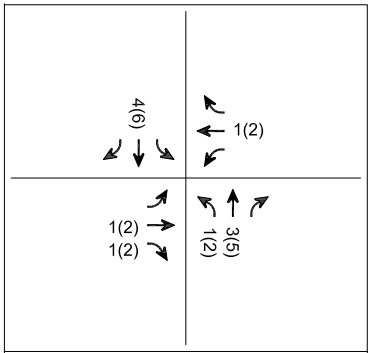


10. Mariposa Avenue & James M Wood Boulevard

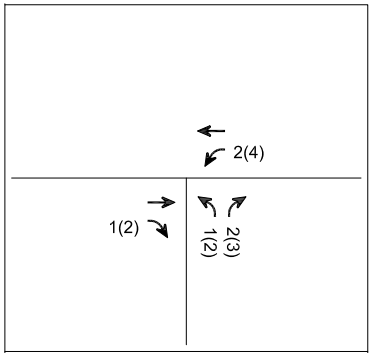
TRIP DISTRIBUTION

FIGURE 8

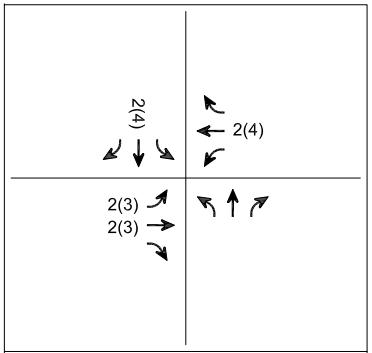




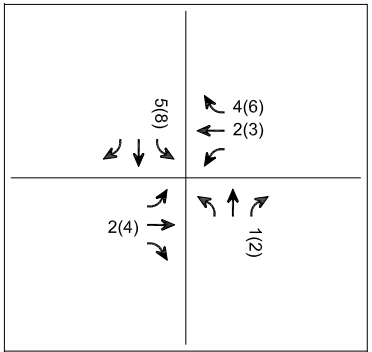
1. Normandie Ave / Irolo St & Wilshire Boulevard



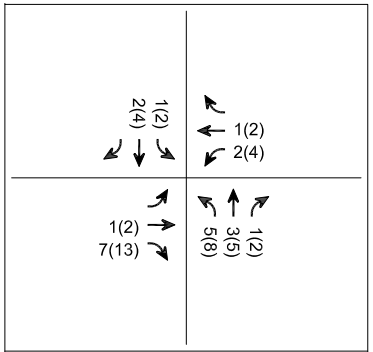
2. Mariposa Avenue & Wilshire Boulevard



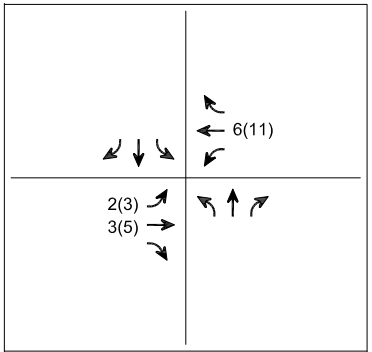
3. Vermont Avenue & Wilshire Boulevard



4. Irolo Street & 8th Street



5. Mariposa Avenue & 8th Street

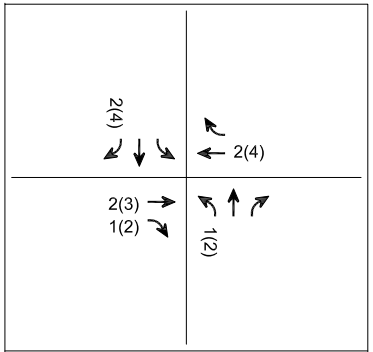


6. Catalina Street & 8th Street

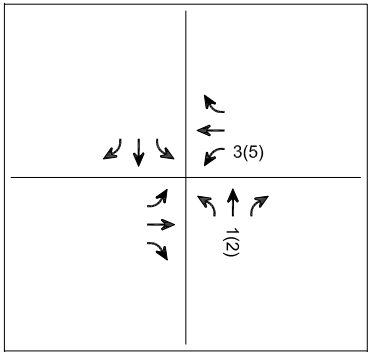
LEGEND

- Project Site
- (#) Study Location - Signalized
- (#) Study Location - Unsignalized
- X(X) AM(PM) Peak Hour Traffic Volumes
- • Project Driveway

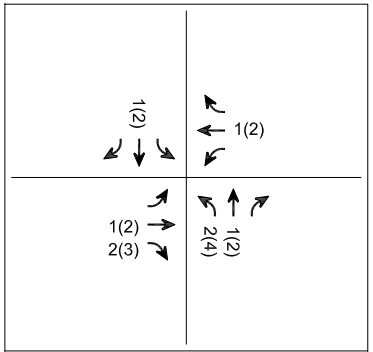
N
Not to Scale



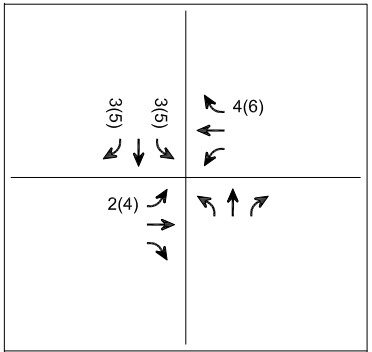
7. Vermont Avenue & 8th Street



8. Irolo Street & James M Wood Boulevard



9. Vermont Avenue & James M Wood Boulevard



10. Mariposa Avenue & James M Wood Boulevard

PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
9

TABLE 8
PROJECT TRIP GENERATION ESTIMATES

Land Use	ITE Land Use	Rate or Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Condominium	230	per du	5.81	17%	83%	0.44	67%	33%	0.52
Hotel	310	per room	8.17	59%	41%	0.53	51%	49%	0.60
Shopping Center	820	per 1,000 sf	42.94	61%	39%	1.00	49%	51%	3.73
Drinking Place	925	per 1,000 sf	N/A	N/A	N/A	N/A	66%	34%	11.34
Apartments	220	per du	6.65	20%	80%	0.51	65%	35%	0.62
Trip Generation Estimates									
Proposed Project									
Condominium	230	8 du	46	1	3	4	3	1	4
Transit/Walk-In Adjustment - 10% [b]			*-5*	*0*	*0*	*0*	*0*	*0*	*0*
Hotel	310	80 rooms	654	25	17	42	24	24	48
Transit/Walk-In Adjustment - 10% [b]			*-65*	*-3*	*-1*	*-4*	*-2*	*-3*	*-5*
Retail	820	4,808 sf	206	3	2	5	9	9	18
Transit/Walk-In Adjustment - 10% [b]			*-21*	*0*	*-1*	*-1*	*-1*	*-1*	*-2*
Internal Capture Adjustment - 5% [c]			*-9*	*0*	*0*	*0*	*0*	*-1*	*-1*
Pass-By Adjustment - 50% [d]			*-88*	*-2*	*0*	*-2*	*-4*	*-4*	*-8*
Karaoke	925	2,465 sf	--	--	--	--	18	10	28
Transit/Walk-In Adjustment - 10% [b]			--	--	--	--	*-2*	*-1*	*-3*
Internal Capture Adjustment - 10% [c]			--	--	--	--	*-2*	*-1*	*-3*
TOTAL PROPOSED PROJECT TRIPS			**718**	**24**	**20**	**44**	**43**	**33**	**76**
Existing Uses to be Removed									
Apartments	220	4 du	27	0	2	2	1	1	2
Transit/Walk-In Adjustment - 10% [b]			*-3*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL EXISTING PROJECT TRIPS			**24**	**0**	**2**	**2**	**1**	**1**	**2**
TOTAL NET NEW PROJECT TRIPS			**694**	**24**	**18**	**42**	**42**	**32**	**74**

Notes:
sf = square feet; du = dwelling units;
[a] Trip generation rates are from *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012).
[d] Per LADOT's *Transportation Impact Study Guidelines* (LADOT, December 2016), the Project Site is located adjacent to a transit corridor, therefore a 10% transit adjustment was applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments.
[c] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development without using an off-site road system.
[d] Per LADOT's *Transportation Impact Study Guidelines*, pass-by adjustment of 50% is allowed for retail space under 50,000 sf.

Chapter 5
Existing and Future with Project Conditions

This chapter describes the operating conditions at signalized intersections after addition of Project traffic. The effects of Project traffic were measured based on both Existing Conditions and Future without Project Conditions. The significant impact thresholds described in Chapter 1 were applied to each signalized intersection.

EXISTING WITH PROJECT CONDITIONS

The Project-only morning and afternoon peak hour traffic volumes described in Chapter 4 and shown in Figure 9 were added to the Existing morning and afternoon peak hour traffic volumes shown in Figure 4. The resulting volumes are illustrated in Figure 10 and represent Existing with Project Conditions (Year 2017) after development of the Project under Existing Conditions.

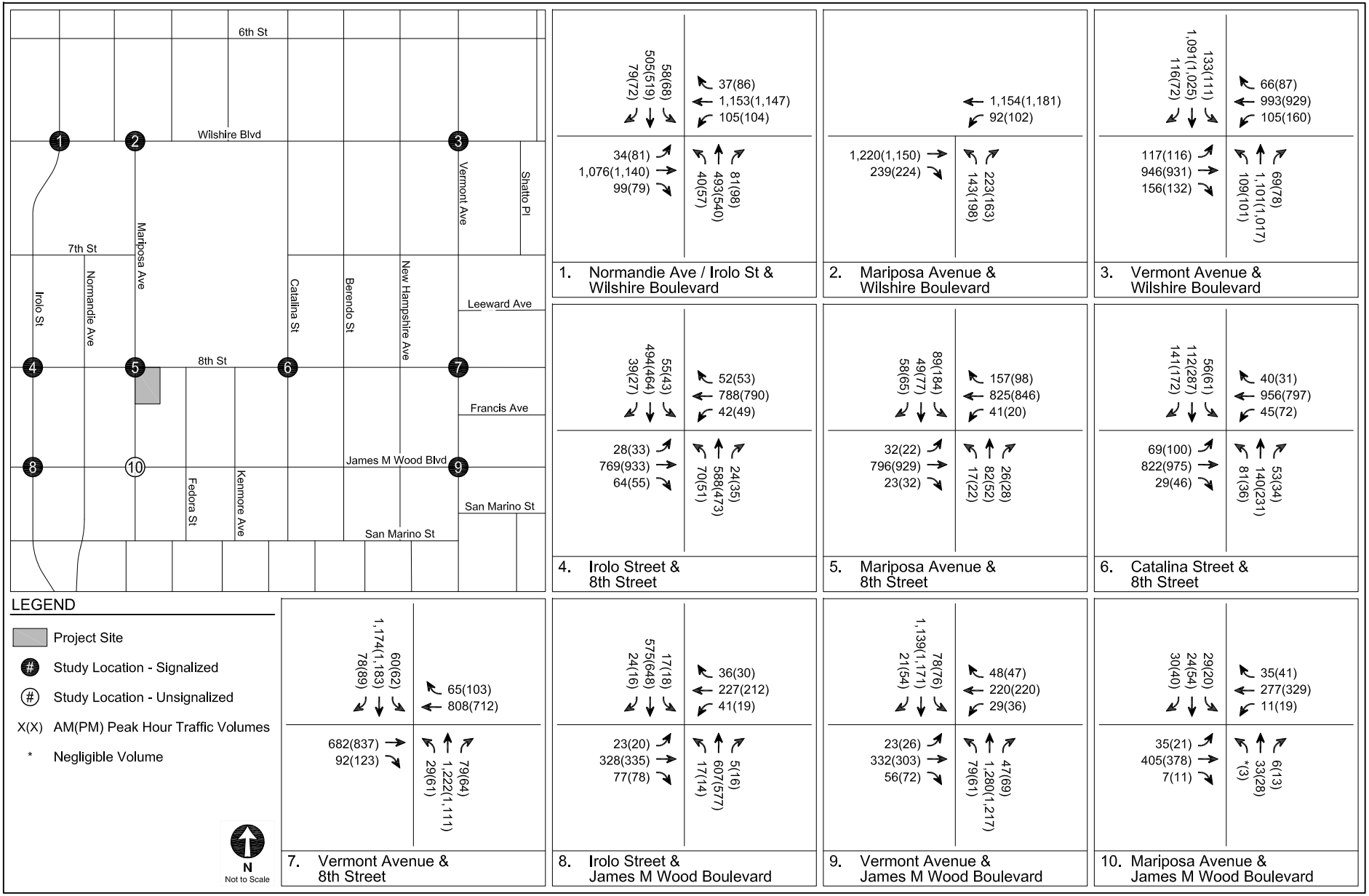
Table 9 summarizes the Existing with Project Conditions during the weekday morning and afternoon peak hours for the nine signalized study intersections. As shown, the Project would not worsen the LOS at seven of the nine signalized intersections from Existing Conditions. As in Existing Conditions, all nine signalized intersections would continue to operate at LOS D or better during both the weekday morning and afternoon peak hours. The Project would not result in significant impacts at any of the nine intersections. Therefore, no mitigation is required.

FUTURE WITH PROJECT CONDITIONS

The Project-only morning and afternoon peak hour traffic volumes described in Chapter 4 and shown in Figure 9 were added to the Future without Project morning and afternoon peak hour traffic volumes shown in Figure 7. The resulting volumes are illustrated in Figure 11 and

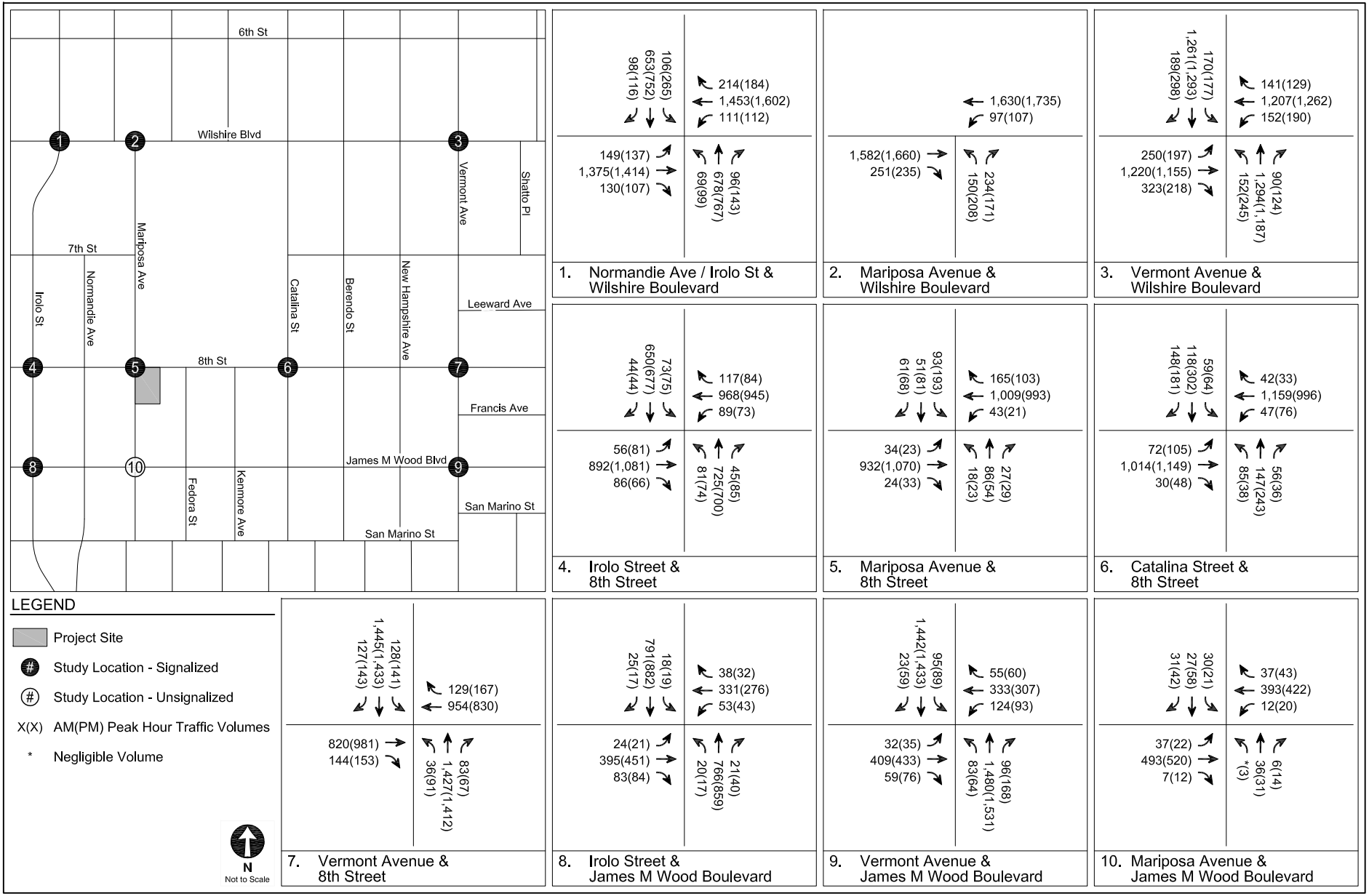
represent Future with Project Conditions (Year 2022) after development of the Project under Future without Project Conditions.

Table 10 summarizes the Future with Project Conditions during the weekday morning and afternoon peak hours for the nine signalized study intersections. As shown, the Project would not worsen the LOS at any intersections from Future without Project Conditions. As in Future without Project Conditions, four of the nine signalized intersections would operate at LOS D or better during both the weekday morning and afternoon peak hours while five would operate at LOS E or F during one or both peak hours. The Project would not result in significant impacts at any of the nine intersections. Therefore, no mitigation is required.



EXISTING WITH PROJECT CONDITIONS (YEAR 2017)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 10



FUTURE WITH PROJECT CONDITIONS (YEAR 2022)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 11

TABLE 9
EXISTING WITH PROJECT CONDITIONS (YEAR 2017)
SIGNALIZED INTERSECTION LEVELS OF SERVICE AND SIGNIFICANT IMPACTS

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			V/C	LOS	V/C	LOS	∆ V/C	Impact
1.	Normandie Avenue / Irolo Street & Wilshire Boulevard	A.M. P.M.	0.595 0.687	A B	0.598 0.691	A B	0.003 0.004	NO NO
2.	Mariposa Avenue & Wilshire Boulevard	A.M. P.M.	0.484 0.479	A A	0.486 0.483	A A	0.002 0.004	NO NO
3.	Vermont Avenue & Wilshire Boulevard	A.M. P.M.	0.820 0.799	D C	0.823 0.802	D D	0.003 0.003	NO NO
4.	Irolo Street & 8th Street	A.M. P.M.	0.740 0.699	C B	0.746 0.707	C C	0.006 0.008	NO NO
5.	Mariposa Avenue & 8th Street	A.M. P.M.	0.437 0.478	A A	0.446 0.495	A A	0.009 0.017	NO NO
6.	Catalina Street & 8th Street	A.M. P.M.	0.535 0.657	A B	0.538 0.659	A B	0.003 0.002	NO NO
7.	Vermont Avenue & 8th Street	A.M. P.M.	0.665 0.681	B B	0.665 0.685	B B	0.000 0.004	NO NO
8.	Irolo Street & James M Wood Boulevard	A.M. P.M.	0.641 0.662	B B	0.643 0.665	B B	0.002 0.003	NO NO
9.	Vermont Avenue & James M Wood Boulevard	A.M. P.M.	0.685 0.667	B B	0.688 0.671	B B	0.003 0.004	NO NO

TABLE 10
FUTURE WITH PROJECT CONDITIONS (YEAR 2022)
SIGNALIZED INTERSECTION LEVELS OF SERVICE AND SIGNIFICANT IMPACTS

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions			
			V/C	LOS	V/C	LOS	∆ V/C	Impact
1.	Normandie Avenue / Irolo Street & Wilshire Boulevard	A.M. P.M.	0.939 1.149	E F	0.941 1.155	E F	0.002 0.006	NO NO
2.	Mariposa Avenue & Wilshire Boulevard	A.M. P.M.	0.614 0.659	B B	0.616 0.663	B B	0.002 0.004	NO NO
3.	Vermont Avenue & Wilshire Boulevard	A.M. P.M.	1.088 1.146	F F	1.091 1.151	F F	0.003 0.005	NO NO
4.	Irolo Street & 8th Street	A.M. P.M.	1.028 1.108	F F	1.034 1.116	F F	0.006 0.008	NO NO
5.	Mariposa Avenue & 8th Street	A.M. P.M.	0.512 0.554	A A	0.521 0.571	A A	0.009 0.017	NO NO
6.	Catalina Street & 8th Street	A.M. P.M.	0.619 0.738	B C	0.622 0.740	B C	0.003 0.002	NO NO
7.	Vermont Avenue & 8th Street	A.M. P.M.	0.849 0.864	D D	0.850 0.865	D D	0.001 0.001	NO NO
8.	Irolo Street & James M Wood Boulevard	A.M. P.M.	0.837 0.919	D E	0.839 0.923	D E	0.002 0.004	NO NO
9.	Vermont Avenue & James M Wood Boulevard	A.M. P.M.	0.903 0.947	E E	0.905 0.951	E E	0.002 0.004	NO NO

Chapter 6

Unsignalized Intersection Analysis

As described in Chapter 1, Intersection #10, Mariposa Avenue & James M Wood Boulevard, was analyzed using the HCM methodology to determine the LOS. Based on *Transportation Impact Study Guidelines,* if an unsignalized intersection is projected to operate at LOS E or F under Future with Project Conditions, a signal warrant analysis should be conducted to evaluate for the potential installation of a new traffic signal. The signal warrant analysis, if necessary, would follow the guidelines set forth in *Manual of Policies and Procedures* (LADOT, December 2008) and the *California Manual on Uniform Traffic Control Devices* (Caltrans, 2014). For completeness, this chapter examines both Existing with Project Conditions and Future with Project Conditions.

UNSIGNALIZED INTERSECTION LEVELS OF SERVICE

Table 11 summarizes the weekday morning and afternoon peak hour delay and corresponding LOS under both Existing with Project Conditions and Future with Project Conditions. As shown, Intersection #10 would operate at LOS C during both the morning and afternoon peak hours under Existing with Project Conditions. It would operate at LOS D during the morning peak hour and LOS E during the afternoon peak hour under Future with Project Conditions. As noted above, this location is two-way stop-controlled, and the worst-case condition applies to vehicles attempting to turn southbound left from Mariposa Avenue onto James M Wood Boulevard. As shown in Figure 11, based on Future with Project Conditions, this includes a total of 30 cars during the morning peak hour and 21 cars during the afternoon peak hour.

SIGNAL WARRANT ANALYSIS

The unsignalized study intersection is anticipated to operate at LOS E during the afternoon peak hour under Future with Project Conditions, and was therefore subject to a signal warrant analysis to determine whether the projected volumes at the intersection warrant the installation of a traffic signal control.

The intersection was analyzed according to Warrant 3 (peak hour). Under Future with Project Conditions, the intersection does not meet the minimum peak hour traffic volume threshold of Warrant 3 and, therefore, should not be signalized. Signal warrant worksheets are provided in Appendix E.

TABLE 11
EXISTING (YEAR 2017) AND FUTURE (YEAR 2022) WITH PROJECT CONDITIONS
UNSIGNALIZED INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing with Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
10.	Mariposa Avenue & James M Wood Boulevard	A.M. P.M.	21.9 24.1	C C	32.4 39.0	D E

Note:
Reported delay is worst-case delay for southbound left-turn from Mariposa Avenue to James M Wood Boulevard.

Chapter 7

Congestion Management Program Analysis

This chapter presents an analysis of the regional transportation facilities in the vicinity of the Project Site, in accordance with the procedures outlined in the CMP.

TRAFFIC IMPACT ANALYSIS GUIDELINES

The CMP requires that traffic impact analyses be performed on three types of facilities:

- Arterial Intersections
- Mainline Freeway Segments
- The Public Transit System

The CMP identifies specific arterial and freeway mainline locations for analysis.

Arterial Intersections

The CMP requires that a traffic impact analysis be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 50 trips to an arterial monitoring intersection. The CMP analysis uses the same CMA methodology as used in earlier chapters for City intersections to determine intersection V/C ratio and LOS. A significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (V/C > 1.00) after the addition of project traffic.

Mainline Freeway Segments

The CMP requires that a traffic impact analysis be performed for all CMP mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 150 trips to a mainline freeway monitoring location (in either direction) during either the weekday morning or afternoon peak hour. The CMP analysis uses a demand-to-capacity (D/C) ratio to determine facility LOS based on capacity identified in Appendix A of the CMP. Similar to arterial monitoring intersections, a significant impact requiring mitigation occurs if project traffic causes an incremental increase in freeway segment D/C ratio of 0.02 or greater to a facility projected to operate at LOS F (D/C > 1.00) after the addition of project traffic.

Public Transit System

The CMP requires that a transit system analysis be performed to determine whether a project would increase transit ridership beyond the current capacity of the transit system.

ARTERIAL INTERSECTION ANALYSIS

The CMP identifies the following three arterial monitoring intersections within two miles of the Project Site:

- Western Avenue & James M Wood Boulevard (0.6 miles southwest of the Project Site)
- Western Avenue & Wilshire Boulevard (0.7 miles northwest of the Project Site)
- Alvarado Street & Wilshire Boulevard (1.3 miles east of the Project Site)

All of these arterial monitoring intersections are outside of the boundaries of the Study Area. The Project trips at these locations were calculated based on the number of trips entering and leaving the Study Area (based on Figure 9) in the direction of the outlying CMP arterial monitoring intersections, conservatively assuming there would be no diverging trips. Based on

this methodology, the number of peak hour Project trips expected at each arterial monitoring intersection is as follows:

Intersection	Peak Hour Trips		Requires CMP Analysis?
	AM	PM	
Western Avenue & James M Wood Boulevard	4	8	No
Western Avenue & Wilshire Boulevard	4	8	No
Alvarado Street & Wilshire Boulevard	4	8	No

The Project would not add more than 50 peak hour trips at any of the arterial monitoring intersections nearest the Project Study Area. Therefore, further analysis of the CMP arterial monitoring intersections is not required.

MAINLINE FREEWAY SEGMENT ANALYSIS

The Project generates fewer than 150 trips during the peak hours, and therefore would not add 150 or more peak hour trips to any freeway segment. No further CMP freeway segment analysis is required.

PUBLIC TRANSIT SYSTEM ANALYSIS

Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes an average vehicle occupancy (AVO) factor of 1.4 in order to estimate the number of person trips to and from the Project and guidance regarding the percentage of person trips that may use public transit. Based on the assumptions in the trip generation estimates shown in Table 8, a transit/walk-in adjustment of up to 10% was applied to account for the use of non-auto travel modes (e.g., rail, light-rail, bus, bicycle, walk, etc.). For the purposes of this analysis, all of the transit/walk-in trip estimates from Table 8 were conservatively assumed to travel via public transit.

As shown in Table 8, prior to transit reduction adjustments, the Project is anticipated to generate approximately 44 morning peak hour trips and 76 afternoon peak hour trips. Assuming an AVO of 1.4, vehicle trips result in an estimated increase of 62 person trips during the morning peak hour and 106 person trips during the afternoon peak hour. Using the 10% mode split, the Project would generate approximately six net new transit trips in the morning peak hour and 11 net new transit trips in the afternoon peak hour.

As detailed in Chapter 2, the Study Area is served by several established bus transit routes, including both local and express service. Even with potential growth in transit ridership by Year 2022, the Project's maximum peak hour transit ridership of only six trips in the morning peak hour and 11 trips in the afternoon peak hour can be easily accommodated within the available capacity of the system. Therefore, the Project is not anticipated to result in regional transit impacts.

Chapter 8
Site Access and Circulation

This chapter presents a summary of how vehicles, pedestrians, and bicycles would access and circulate the Project Site.

VEHICULAR ACCESS AND CIRCULATION

Access to the Project Site would be provided via a full-access driveway on 8th Street and Mariposa Avenue, south of 8th Street. The driveway on Mariposa Avenue would provide direct access to parking, while the 8th Street driveway would provide access to the valet pick-up and drop-off area. A secondary ramp from the valet area to the subterranean parking would be for valet operators only so they would not need to use public roads to travel between the valet area and the parking structure. The driveways would be designed to LADOT standards under the review of City staff. Projected arriving traffic volumes are low enough that entering vehicles would not queue onto the public street, even if parking garage access is controlled for security.

PEDESTRIAN ACCESS AND CIRCULATION

Pedestrian access to the lobby serving the hotel and residents would be provided on 8th Street, with a secondary and/or emergency access on Mariposa Avenue adjacent to the driveway and on the east edge of the building near 8th Street. All pedestrian access would be completely separated from the driveway and, therefore, no pedestrian impacts would occur.

BICYCLE ACCESS AND CIRCULATION

Short-term bicycle parking would be provided on the ground level, accessible from the sidewalk at the southeast side of the building. Long-term bicycle parking would be provided on the second subterranean parking level adjacent to the elevators. These spaces are designed to be accessed via the elevators to the lobby, though bicyclists may choose to use the vehicular parking ramps and the driveway on 8th Street, an action which cannot be prevented without full vehicular access gates. No dedicated bicycle lanes currently exist on Mariposa Avenue or 8th Street, nor have any been proposed in the 2010 Bicycle Plan.

Chapter 9
Parking

This chapter provides an analysis of the vehicular and bicycle parking requirements for the Project set forth in the *Los Angeles Municipal Code* (City of Los Angeles, March 31, 2017) (LAMC) in relation to the Project's proposed parking supply.

PARKING SUPPLY

As proposed, the Project includes a total of 142 vehicular parking spaces within the three-level subterranean parking structure. As further described below, the Project requires a total of 97 parking spaces to meet LAMC requirements for all land uses. Additionally, the Project would provide 32 bicycle parking spaces, including 20 long-term and 12 short-term spaces.

VEHICULAR PARKING CODE REQUIREMENTS

The LAMC details City parking requirements for new developments. The Project is located within an enterprise zone, and in turn is allowed a density bonus and a parking option that differs from the standard LAMC ratios from LAMC Section 12.21.A.4 for the commercial space (including the retail and karaoke bar). The hotel and condominium parking requirements remain the same as the LAMC rates. As detailed in Table 12, the hotel use requires one parking space per the first 30 guestrooms, 0.5 parking spaces per the next 30 guestrooms, and 0.33 parking spaces per guestroom thereafter. The condominium use requires two parking spaces per unit and 0.25 guest parking spaces per unit and the commercial space (including hotel amenity space) requires one parking space per 500 sf.

As shown in Table 12, the Project would require a total of 97 parking spaces, including 52 spaces for hotel patrons, 18 spaces for residents and guests, and 15 spaces for the commercial space,

and 12 spaces for the hotel amenity space such as the bar, fitness center, and business center. The Project would provide 142 vehicular parking spaces and would, therefore, meet this requirement.

BICYCLE PARKING REQUIREMENTS

Table 13 summarizes the bicycle parking requirements for the Project based on LAMC Section 12.21.A.16. There are distinct requirements for the number of long-term spaces and short-term spaces. Long-term spaces are for bicycle storage overnight or longer, while short-term spaces are more easily accessible as they are typically used for hours or less at a time. As shown in Table 13, the hotel use requires one long-term and one short-term bicycle parking spaces per 20 guestrooms, the condominium use requires one long-term bicycle parking space per unit and one short-term bicycle parking space per 10 units, and the commercial space (including hotel amenity space) requires one long-term and one short-term bicycle parking space per 2,000 sf. These ratios were applied to the Project analyzed in this traffic study.

As detailed in Table 13, the Project is required to provide a total of 31 bicycle parking spaces, including 19 long-term and 12 short-term spaces. The Project would provide 32 bicycle parking spaces, including 20 long-term and 12 short-term spaces and, therefore, would meet this requirement.

TABLE 12
CODE VEHICLE PARKING REQUIREMENT

Type of Room or Land Use	Units or Size	Parking Spaces
Los Angeles Municipal Code Requirement [a]		
Hotel - First 30 Rooms	1 space per room	
Hotel - Rooms 31 through 60	0.5 spaces per room	
Hotel - Over 60 Rooms	0.33 spaces per room	
Condominium - Resident Parking	2 spaces per unit	
Condominium - Guest Parking	0.25 spaces per unit	
Commercial Space and Hotel Amenity Space	1 space per 500 sf [c]	
Project Parking Requirement		
Hotel	80 rooms	52
Condominium	8 units	18
Commercial Space (Karaoke and Retail)	7,273 sf	15
Hotel Amenity Space	5,751 sf	12
TOTAL CODE REQUIREMENT		**97**

Notes:

sf = square feet

[a] Pursuant to LAMC Section 12.21.A.4.

[b] Commercial parking requirement includes an exception for all Enterprise Zones outside of Downtown Parking District (DPD) per LAMC Section 12.21.A.4(x)

TABLE 13
CODE BICYCLE PARKING REQUIREMENT

Type of Room or Land Use	Units or Size	Long-Term Spaces	Short-Term Spaces
Los Angeles Municipal Code Requirement [a]			
Hotel		1 space per 20 rooms	1 space per 20 rooms
Condominium		1 space per unit	1 space per 10 units
Commercial Space and Hotel Amenity Space		1 space per 2,000 sf	1 spaces per 2,000 sf
Project Parking Requirement			
Hotel	80 units	4	4
Condominium	8 units	8	1
Commercial Space (Karaoke and Retail)	7,273 sf	4	4
Hotel Amenity Space	5,751 sf	3	3
TOTAL CODE REQUIREMENT		**19**	**12**

Notes:
sf = square feet
[a] Bicycle parking requirements per LAMC Section 12.21.A.16.

Chapter 10

Construction Impact Analysis

This chapter summarizes the construction schedule and construction impact analysis for the Project. The construction impact analysis relates to the temporary impacts that may result from the construction activities of the Project, which may include safety, operational, or capacity impacts, and was performed in accordance with *L.A. CEQA Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles* (City of Los Angeles, 2006) (*L.A. CEQA Thresholds Guide*).

TYPES OF CONSTRUCTION IMPACTS

L.A. CEQA Thresholds Guide identifies four types of in-street construction impacts. Each of the four types of impacts refers to a particular population that could be inconvenienced by construction activities. The four types of impacts and related populations are:

1. Temporary traffic impacts – potential impacts on vehicular travelers on roadways
2. Temporary loss of access – potential impacts on visitors entering and leaving sites
3. Temporary loss of bus stops or rerouting of bus lines – potential impacts on bus travelers
4. Temporary loss of on-street parking – potential impacts on parkers

The factors used to determine the significance of a project's impacts involve the likelihood and extent to which an impact might occur, the potential inconvenience caused to a population, and consideration for public safety. Traffic impacts from construction activities could occur as a result of the following types of activities:

- Increases in truck traffic associated with export or import of fill materials and delivery of construction materials

- Increases in automobile traffic associated with construction workers traveling to and from the project site
- Reductions in existing street capacity or on-street parking from temporary lane closures necessary for the construction of roadway improvements, utility relocation, and drainage facilities
- Blocking existing vehicle or pedestrian access to other parcels fronting streets

The impact of construction traffic (including haul trucks) would be a lessening of the capacities of access streets and haul routes due to slower movements and larger turning radii of trucks.

PROPOSED CONSTRUCTION SCHEDULE

The Project is anticipated to be constructed over a period of approximately 24 months, with completion anticipated in Year 2022. Peak haul truck activity occurs during excavation and grading, and peak worker activity occurs during building construction. These two phases of construction were studied in greater detail.

EXCAVATION AND GRADING PHASE

The peak period of truck activity during construction would occur during excavation and grading of the Project Site. Based on projections compiled for the Project, approximately 24,700 cubic yards (CY) of material would be excavated and removed from the Project Site over a 30-workday period. That equates to approximately 825 CY of material exported each workday, requiring 59 haul trucks per work day based on an anticipated haul truck capacity of 14 CY each. Thus, up to 118 daily truck trips (59 inbound, 59 outbound) are forecast to occur during the excavation and grading period, or approximately 14 trips per hour (seven inbound, seven outbound) if occurring uniformly over a typical eight-hour workday.

Transportation Research Circular No. 212 defines passenger car equivalency (PCE) for a vehicle as the number of through moving passenger cars to which it is equivalent based on the vehicle's headway and delay-creating effects. Table 8 of *Transportation Research Circular No. 212* and Exhibit 16.7 of the HCM suggest a PCE of 2.0 for trucks. Assuming a PCE factor of 2.0,

the 118 truck trips would be equivalent to 236 daily PCE trips. The 14 hourly truck trips would be equivalent to 28 PCE trips (14 inbound, 14 outbound) per hour.

This is fewer than the number of trips anticipated to be generated by the Project upon completion, based on the estimates shown in Table 8. Therefore, as there would be no impact from Project traffic, there would also be no impact from haul truck traffic. Further, with the implementation of the Construction Management Plan, which is described in more detail later in this chapter, it is anticipated that almost all haul truck activity to and from the Project Site would also occur outside of the peak hours.

BUILDING CONSTRUCTION PHASE

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

At its peak, construction is anticipated to require up to 15 daily workers. On most of the workdays during the 24-month construction period, there would be far fewer workers than on the peak day. Assuming minimal carpooling amongst those workers, an AVO of 1.135 persons per vehicle was applied, as provided in *CEQA Air Quality Handbook* (South Coast Air Quality Management District, 1993). Therefore, 15 workers would result in a total of 13 vehicles that would arrive and depart from the Project Site each day. The estimated number of daily trips associated with the construction workers is approximately 26 (13 inbound and 13 outbound trips).

Because construction would typically begin at 7:00 AM, workers would generally arrive to the site prior to the morning peak hour and many would leave prior to the afternoon peak hour. It is worth noting that the number of daily construction worker trips is well under the 706 daily gross trips the Project is estimated to generate once operational (as shown in Table 8).

Because most of the construction worker traffic would occur outside of the peak hours, and because the Project did not identify any significant intersection impacts as described in Chapter 5, Project construction is not expected to cause a significant traffic impact at any of the study intersections.

POTENTIAL IMPACTS ON ACCESS, TRANSIT, AND PARKING

Construction activities are expected to be primarily contained within the Project Site boundaries. However, it is expected that construction fences may encroach into the public right-of-way (e.g., sidewalk and roadways) adjacent to the Project Site. The curb lanes on Mariposa Avenue, which provide on-street parking, will be used intermittently throughout the construction period for equipment staging, concrete pumping, etc. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan. Travel lanes would be maintained in each direction on both Mariposa Avenue and 8th Street throughout the construction period, and emergency access would not be impeded.

The use of the public right-of-way along Mariposa Avenue may require temporary rerouting of pedestrian traffic as the sidewalks fronting the Project Site would be closed. The Construction Management Plan would include measures to ensure pedestrian safety along the affected sidewalks and temporary walkways (e.g., use of directional signage, maintaining continuous and unobstructed pedestrian paths, and/or providing overhead covering).

There is a bus stop adjacent to the Project Site along 8th Street that may need to be temporarily relocated. Parking is allowed along Mariposa Avenue, so construction fences could result in the temporary loss of approximately 140 linear feet of unlimited curb parking on the east side of Mariposa Avenue. With the removal of the existing uses at the Project Site prior to construction activity, the loss of the adjacent on-street parking is not expected to result in significant parking impacts.

Project construction is not expected to create hazards for drivers, bicyclists, or pedestrians so long as commonly practiced safety procedures for construction are followed. Such procedures and other measures (e.g., to address temporary traffic control, lane closures, sidewalk closures,

etc.) have been incorporated into the Construction Management Plan. The construction-related impacts associated with access, transit, and parking are anticipated to be less than significant, and the implementation of the Construction Management Plan described below would further reduce those impacts.

CONSTRUCTION MANAGEMENT PLAN

A detailed Construction Management Plan would be prepared and submitted to the City for review and approval. The Construction Management Plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community.

The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and may include, but not be limited to, the following elements, as appropriate:

- Prohibition of construction worker parking on nearby residential streets.
- Temporary traffic control during all construction activities encroaching on public rights-of-way to improve traffic flow and safety on public roadways.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate.
- Scheduling of construction-related deliveries so as to occur outside the commuter peak hours to the extent feasible.

References

2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element, Los Angeles Department of City Planning, adopted March 1, 2011.

2010 Highway Capacity Manual, Transportation Research Board, 2010.

2010 Los Angeles County Congestion Management Program, Los Angeles County Metropolitan Transportation Authority, 2010.

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Mobility Plan 2035, An Element of the General Plan, Los Angeles Department of City Planning, August 11, 2015.

Transportation Impact Study Guidelines, Los Angeles Department of Transportation, December 2016.

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

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

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

Appendix A

Memorandum of Understanding

LADOT

Transportation Impact Study Memorandum of Understanding (MOU)

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

I. PROJECT INFORMATION

Project Name: 3216 W. 8th St. Mixed-Use Project

Project Address: 3216 W. 8th Street, Los Angeles, CA 90005

Project Description: The Project would construct 72 hotel rooms, 16 condominium units, 5,085 square feet of ground-floor retail, and a 3,128 square foot karaoke bar. The existing surface parking lot and 4 apartment units would be removed to accommodate the Project. See Figure 1.

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

II. TRIP GENERATION

Geographic Distribution: N 25.00 % S 20.00 % E 30.00 % W 25.00 %

Illustration of Project trip distribution percentages at Study intersections attached? *(Required)* ■ Yes ☐ No
See Figures 2 and 3 and Table 1

Trip Generation Adjustments *(Exact amount of credit subject to approval by LADOT)*

	Yes	No
Transit Usage	■	☐
Transportation Demand Management	☐	■
Existing Active Land Use	■	☐
Previous Land Use	☐	■
Internal Trip	■	☐
Pass-By Trip	■	☐

Source of Trip Generation Rate(s)? ■ ITE 9th Edition ☐ Other: _____

Trip generation table including a description of the proposed land uses, ITE rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? *(Required)* ■ Yes ☐ No
See Figure 4 and Table 2

	IN	OUT	TOTAL
AM Trips	22	18	40
PM Trips	46	34	80

III. STUDY AREA AND ASSUMPTIONS

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

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

Subject to Freeway Impact Analysis, in addition to CMP Analysis? *(Freeway analysis screening filter must be included in this MOU; selecting "yes" implies that at least one criteria was satisfied)* ☐ Yes ■ No

Map of Study Intersections attached? *(May be subject to LADOT revision after initial impact analysis)* ■ Yes ☐ No

Is this Project located on a street within the High Injury Network? ■ Yes ☐ No
See Table 3 for Related Projects List
See Tables 4 and 5 for Caltrans Screening Analysis

IV. CONTACT INFORMATION

	CONSULTANT	DEVELOPER
Name:	Gibson Transportation Consulting, Inc.	
Address:	555 W. 5th Street, Suite 3375, Los Angeles, CA 90013	
Phone Number:	(213) 683-0088	
E-Mail:	jchambers@gibsontrans.com	

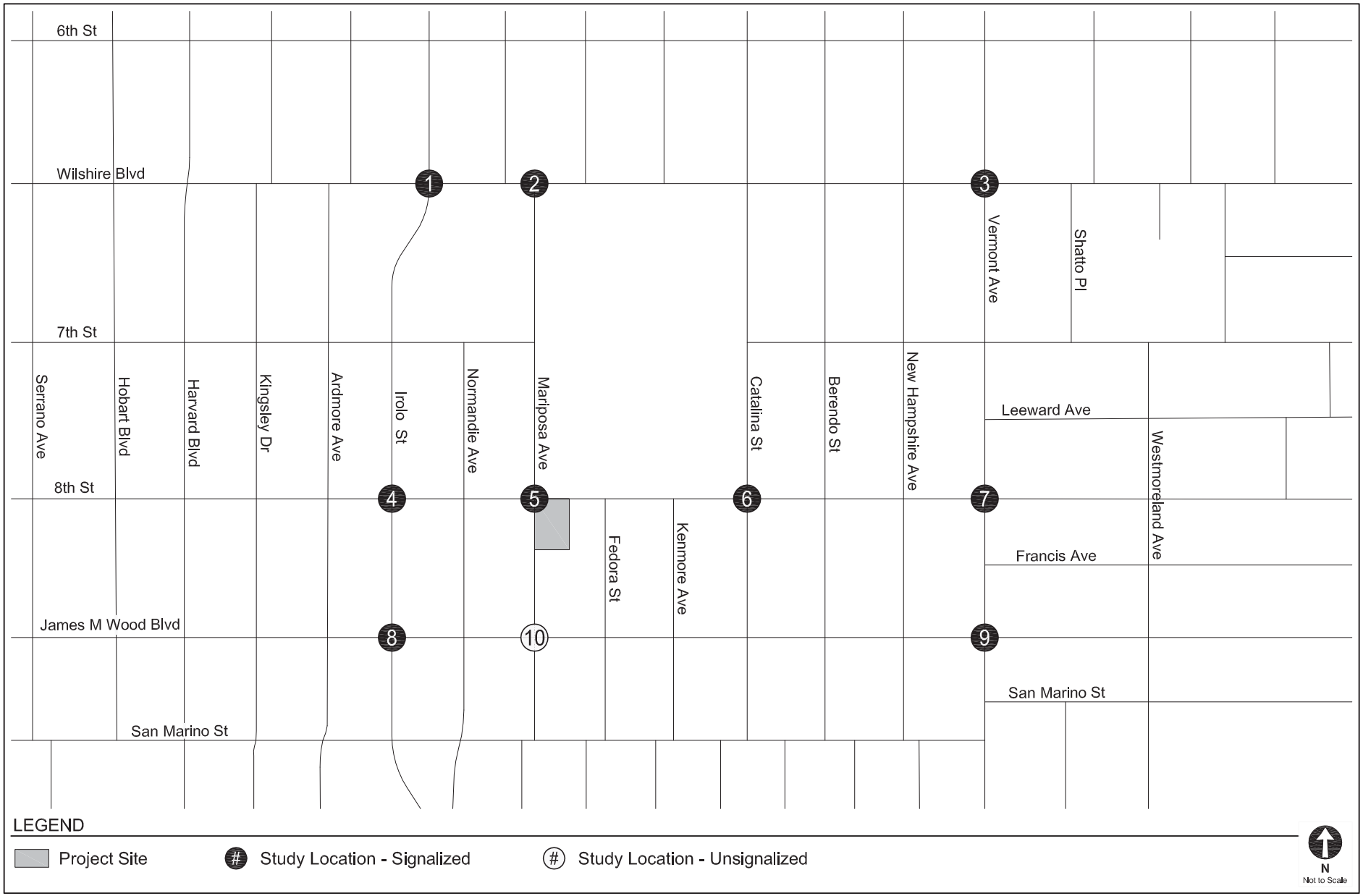
Approved by: x Jonathan Chambers Digitally signed by Jonathan Chambers DN: cn=Jonathan Chambers, o, ou, email=jchambers@gibsontrans.com, c=US Date: 2017.06.16 14:19:59 -07'00' 6/16/2017 x 6/27/17

Consultant's Representative | Date | LADOT Representative | Date

Source: EWAI Architects, June, 2017.

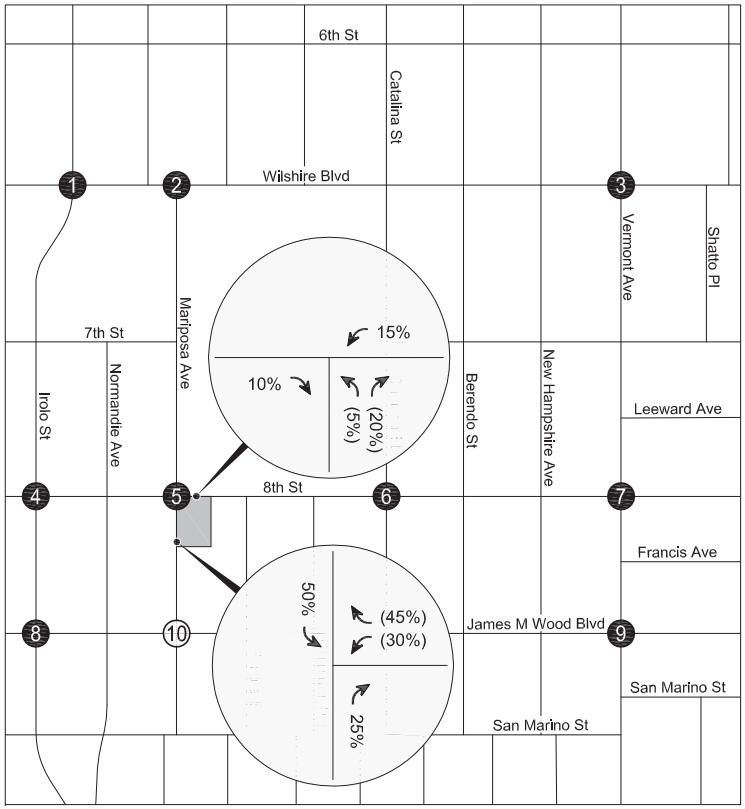
PROJECT SITE PLAN

FIGURE 1



STUDY AREA

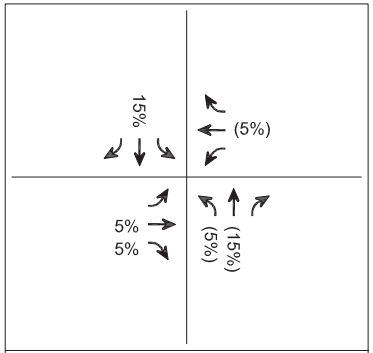
FIGURE 2



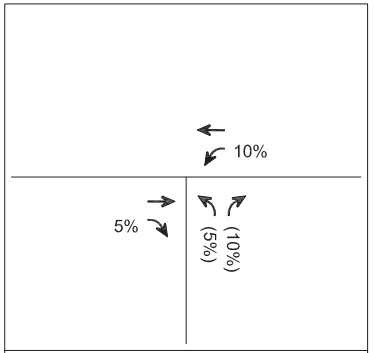
LEGEND

- Project Site
- (#) Study Location - Signalized
- (#) Study Location - Unsignalized
- %(%) Inbound(Outbound) Trip Percentage
- • Project Driveway

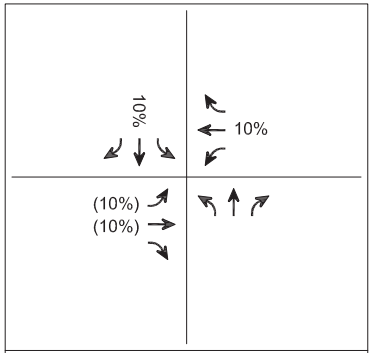
N
Not to Scale



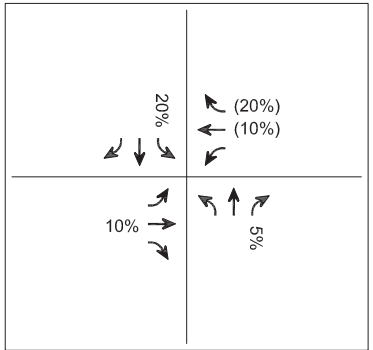
1. Normandie Ave / Irolo St & Wilshire Boulevard



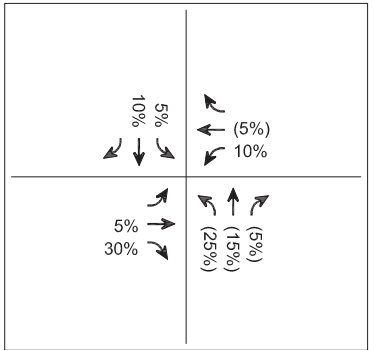
2. Mariposa Avenue & Wilshire Boulevard



3. Vermont Avenue & Wilshire Boulevard



4. Irolo Street & 8th Street



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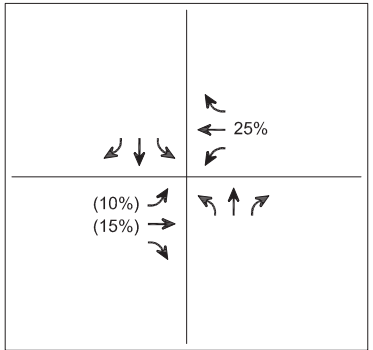
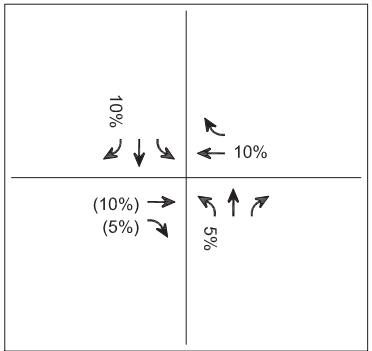
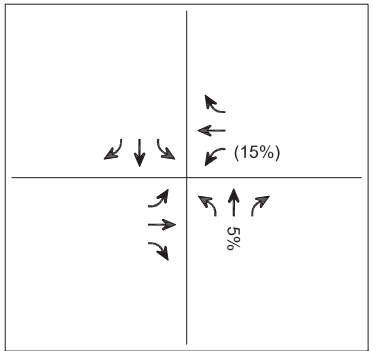


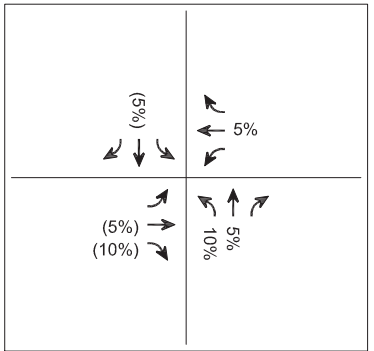
6. Catalina Street & 8th Street



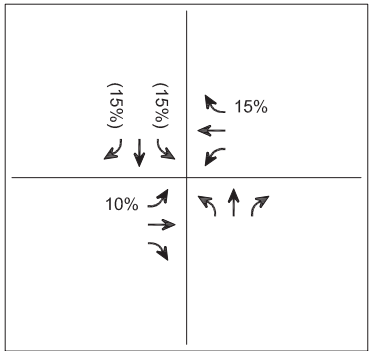
7. Vermont Avenue & 8th Street



8. Irolo Street & James M Wood Boulevard



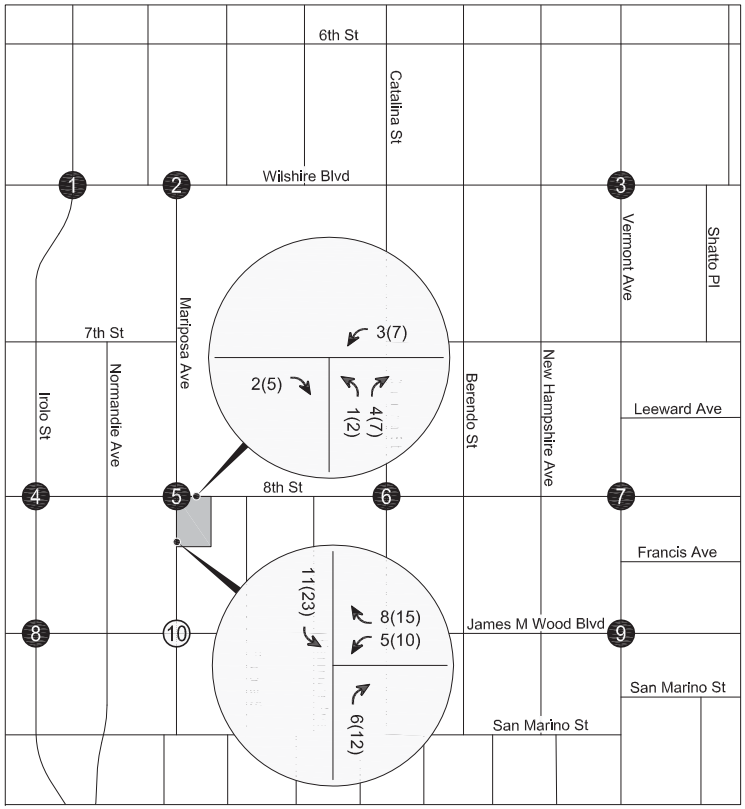
9. Vermont Avenue & James M Wood Boulevard

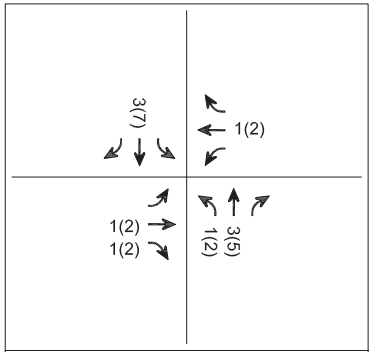


10. Mariposa Avenue & James M Wood Boulevard

TRIP DISTRIBUTION

FIGURE 3





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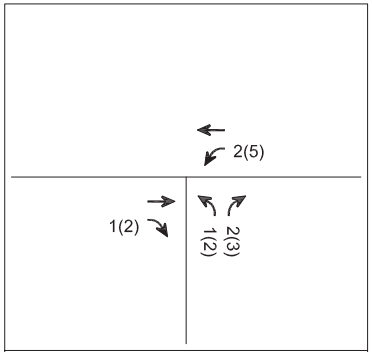
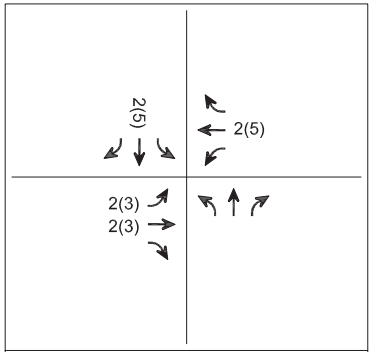
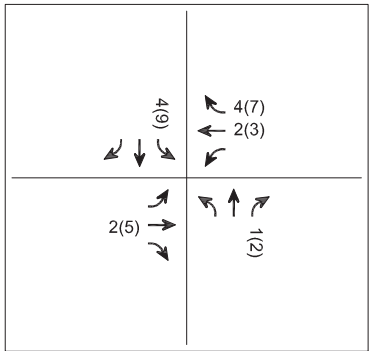


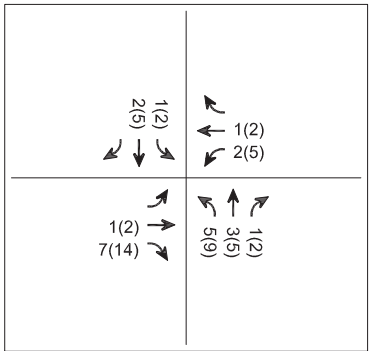
2. Mariposa Avenue & Wilshire Boulevard



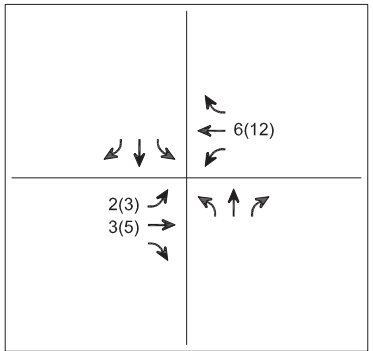
3. Vermont Avenue & Wilshire Boulevard



4. Irolo Street & 8th Street



5. Mariposa Avenue & 8th Street

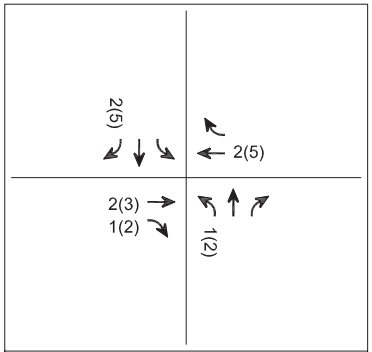


6. Catalina Street & 8th Street

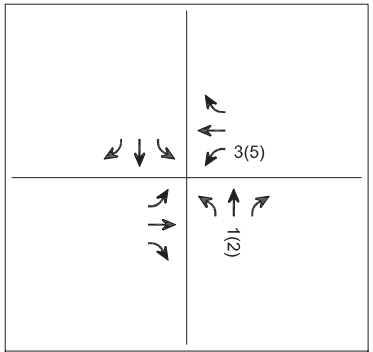
LEGEND

- Project Site
- # Study Location - Signalized
- (#) Study Location - Unsignalized
- X(X) AM(PM) Peak Hour Traffic Volumes
- • Project Driveway

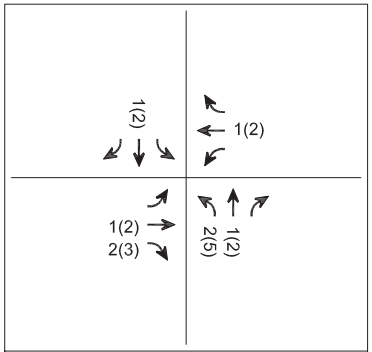
N
Not to Scale



7. Vermont Avenue & 8th Street



8. Irolo Street & James M Wood Boulevard



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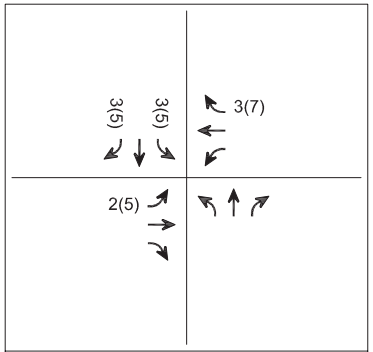


10. Mariposa Avenue & James M Wood Boulevard

PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
4

TABLE 1
LIST OF ANALYZED INTERSECTIONS

No.	North/South Street	East/West Street
Signalized Intersections		
1.	Normandie Avenue / Irolo Street	Wilshire Boulevard
2.	Mariposa Avenue	Wilshire Boulevard
3.	Vermont Avenue	Wilshire Boulevard
4.	Irolo Street	8th Street
5.	Mariposa Avenue	8th Street
6.	Catalina Street	8th Street
7.	Vermont Avenue	8th Street
8.	Irolo Street	James M Wood Boulevard
9.	Vermont Avenue	James M Wood Boulevard
Unsignalized Intersections		
10.	Mariposa Avenue	James M Wood Boulevard

TABLE 2
PROJECT TRIP GENERATION ESTIMATES

Land Use	ITE Land Use	Rate or Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Condominium	230	per du	5.81	17%	83%	0.44	67%	33%	0.52
Hotel	310	per room	8.17	59%	41%	0.53	51%	49%	0.60
Shopping Center	820	per 1,000 sf	42.94	61%	39%	1.00	49%	51%	3.73
Drinking Place	925	per 1,000 sf	N/A	N/A	N/A	N/A	66%	34%	11.34
Apartments	220	per du	6.65	20%	80%	0.51	65%	35%	0.62
Trip Generation Estimates									
Proposed Project									
Condominium	230	16 du	93	1	6	7	5	3	8
Transit/Walk Adjustment - 10% [b]			*-9*	*0*	*-1*	*-1*	*-1*	*0*	*-1*
Hotel	310	72 rooms	588	22	16	38	22	21	43
Transit/Walk Adjustment - 10% [b]			*-59*	*-2*	*-2*	*-4*	*-2*	*-2*	*-4*
Retail	820	5,085 sf	218	3	2	5	9	10	19
Transit/Walk Adjustment - 10% [b]			*-22*	*0*	*-1*	*-1*	*-1*	*-1*	*-2*
Internal Capture Adjustment - 5% [c]			*-10*	*0*	*0*	*0*	*0*	*-1*	*-1*
Pass-By Adjustment - 50% [d]			*-93*	*-2*	*0*	*-2*	*-4*	*-4*	*-8*
Karaoke	925	3,128 sf	--	--	--	--	23	12	35
Transit/Walk Adjustment - 10% [b]			--	--	--	--	*-2*	*-2*	*-4*
Internal Capture Adjustment - 10% [c]			--	--	--	--	*-2*	*-1*	*-3*
TOTAL PROPOSED PROJECT TRIPS			**706**	**22**	**20**	**42**	**47**	**35**	**82**
Existing Uses to be Removed									
Apartments	220	4 du	27	0	2	2	1	1	2
Transit/Walk Adjustment - 10% [b]			*-3*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL EXISTING PROJECT TRIPS			**24**	**0**	**2**	**2**	**1**	**1**	**2**
TOTAL NET NEW PROJECT TRIPS			**682**	**22**	**18**	**40**	**46**	**34**	**80**

Notes:

sf = square feet; du = dwelling units;

[a] Trip generation rates are from *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012).

[d] Per LADOT's *Transportation Impact Study Guidelines* (LADOT, December 2016), the Project Site is located adjacent to a transit corridor, therefore a 10% transit adjustment was applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments.

[c] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development without using an off-site road system.

[d] Per LADOT's *Transportation Impact Study Guidelines*, pass-by adjustment of 50% is allowed for retail space under 50,000 sf.

TABLE 3
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
1.	Office & Apartments	3323 W Olympic Blvd	40 apartment units and 277,720 sf office	1,267	57	30	87	44	82	126
2.	Gaju Marketplace (The "G")	450 S Western Ave	130,500 sf retail market	3,019	47	29	76	138	138	276
3.	Mixed-Use	3670 W Wilshire Blvd	378 condominium units and 8,000 sf commercial	2,480	55	142	197	144	76	220
4.	Shopping Center / Mixed-Use	3060 W Olympic Blvd	109,006 sf retail	4,134	60	26	86	169	191	360
5.	Mixed-Use	805 S Catalina St	224 condominium units and 7,000 sf retail	1,935	24	119	143	110	57	167
6.	Western Galleria Market	100 N Western Ave	98 apartment units and 30,000 sf retail	940	17	40	57	54	38	92
7.	Wilshire Temple Master Plan	3663 W Wilshire Blvd	School and office improvements	825	94	44	138	20	3	23
8.	Health Club	3470 W Wilshire Blvd	20,178 sf health club	231	-13	6	-7	22	-1	21
9.	Berendo Apartments (688)	688 S Berendo St	136 apartment units	678	10	42	52	41	22	63
10.	Berendo Apartments (680)	680 S Berendo St	174 apartment units	1,000	15	61	76	61	32	93
11.	Apartment Project	685 S New Hampshire Ave	177 apartment units	1,000	15	61	76	61	32	93
12.	1020 Fedora Street Hotel	1020 S Fedora St	86-room hotel	616	28	14	42	23	21	44
13.	Residential	3640 W Wilshire Blvd	209 apartment units	1,182	18	72	90	73	40	113
14.	Restaurants	135 N Western Ave	11,904 sf restaurants	457	2	2	4	25	13	38

TABLE 3 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
15.	Apartment Project	535 S Kingsley Dr	85 apartment units	543	8	31	39	36	19	55
16.	Mixed-Use	940 S Western Ave	81 apartment units and 8,000 sf retail	380	6	31	37	26	11	37
17.	Apartment Project	800 S Harvard Blvd	113 apartment units and 7,000 sf retail	827	14	32	46	44	33	77
18.	Hotel and Retail	4110 W 3rd St	173-room hotel and 2,780 sf retail	1,185	45	35	80	46	40	86
19.	Mixed-Use	700 S Manhattan Pl	161 apartment units and 10,000 sf restaurant	1,260	19	57	76	71	46	117
20.	Apartment Project	1011 S Serrano Ave	91 apartment units	545	8	33	41	32	18	50
21.	Mixed-Use	3076 W Olympic Blvd	226 apartment units and 16,000 sf retail	1,567	25	78	103	90	56	146
22.	Apartment Project	3350 W Wilshire Blvd	120 apartment units	728	11	43	54	47	25	72
23.	Apartment Project	850 S Crenshaw Blvd	44 apartment units	293	4	18	22	18	10	28
24.	Apartment Project	427 S Berendo St	85 apartment units	288	5	17	22	17	10	27
25.	Mixed-Use	3100 W 8th St	100 apartment units and 9,496 sf retail	100	10	41	51	29	33	62
26.	Apartment Project	1017 S Mariposa Ave	79 apartment units	373	5	23	28	23	12	35
27.	Apartment Project	411 S Normandie Ave	224 apartment units	1,407	22	86	108	87	47	134
28.	Mixed-Use	3525 W 8th St	367 apartment units, 23,000 sf supermarket, and 16,500 sf retail	1,214	8	121	129	83	25	108

TABLE 3 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
29.	Mixed-Use	4074 W 5th St	119 apartment units and 13,000 sf retail	908	13	44	57	51	32	83
30.	Apartment Project	815 S Kingsley Dr	90 apartment units	521	7	32	39	30	18	48
31.	Postpartum Extended Care and Retail	257 S Mariposa Ave	140 apartment units for postpartum care and 3,490 sf retail	1,036	14	58	72	61	33	94
32.	Mixed-Use	3986 W Wilshire Blvd	228 apartment units, 5,000 sf coffee shop, 5,000 sf restaurant, and 12,000 sf retail	1,354	100	-23	77	124	-77	47
33.	Mixed-Use	3545 W Wilshire Blvd	433 apartment units and 49,849 sf retail	917	-42	83	41	84	10	94
34.	Mixed-Use	605 S Vermont Ave	103 apartment units and 30,937 sf museum	755	17	39	56	42	37	79
35.	Mixed-Use	3700 W Wilshire Blvd	506 condominium units, 40,323 sf retail, and 21,712 sf restaurant	3,500	49	152	201	178	80	258
36.	Mixed-Use	3240 W Wilshire Blvd	162-room hotel and 545 apartment units	1,353	15	173	188	89	23	112
37.	Mixed-Use	3170 W Olympic Blvd	252 apartment units and 32,300 sf retail	1,624	24	89	113	94	56	150
38.	Harvard Boulevard Hotel	679 S Harvard Blvd	110-room hotel and 1,000 sf commercial space	778	29	20	49	30	27	57
39.	The Nest on Catalina	621 S Catalina St	165 apartment units, 8,000 sf retail, 15,000 sf nightclub, and 15,000 sf hall	2,776	26	55	81	180	95	275
40.	Apartment Project	3875 W Wilshire Blvd	196 apartment units	1,114	17	68	85	69	37	106
41.	Urban Commons Gramercy	3377 W Olympic Blvd	142 assisted living units, 9,246 sf medical office, and 3,179 sf retail	254	12	-3	9	11	25	36
42.	Mixed-Use	3600 W Wilshire Blvd	760 apartment units and 10,670 sf retail	3,264	34	201	235	202	99	301

TABLE 3 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
43.	Wilshire Gate Project	631 S Vermont Ave	200-room hotel, 250 condominium units, 49,227 sf office, and 21,320 sf retail	2,599	95	95	190	115	120	235
44.	Hotel	966 S Dewey Ave	99 hotel rooms	677	28	15	43	24	24	48
45.	Mixed-Use	3751 W 6th St	266-room hotel, 44 apartment units, and 20,000 sf retail	1,182	29	20	49	33	25	58
46.	Apartment Project	748 S Kingsley Dr	67 apartment units	406	6	25	31	24	14	38
47.	Mixed-Use	3323 W Olympic Blvd	208 condominium units and 3,500 sf retail	409	-13	49	36	39	-7	32
48.	Mixed-Use	3986 W Wilshire Blvd	228 apartment units, 12,000 sf retail, 3,500 sf restaurant, and 1,750 sf coffee shop	503	-50	6	-44	53	25	78
49.	Vermont Corridor Development Plan	Vermont Ave & 6th Street	471,000 sf office, 246 apartment units, 72-unit sr. housing, community center, retail	3,215	216	104	320	121	293	414
50.	Mixed-Use	3033 W Wilshire Blvd	189 condominium units and 5,500 sf retail	816	12	49	61	45	29	74
51.	Mixed-Use	820 S Hoover St	32 condominium units and 4,500 sf retail	414	7	15	22	18	14	32
52.	Affordable Housing and Asissted Living	2924 W 8th St	42 affordable apartment units and 43 assisted living units	416	6	17	23	18	10	28
53.	Southwestern Law School Expansion	3050 W Wilshire Blvd	133 student units, 450-seat lecture hall, and 43,400 sf administrative space	-1,337	-35	-16	-51	-45	-52	-97
54.	Camino Nuevo Charter School Relocation	3400 W 3rd St	656-student K-8 charter school	764	146	120	266	43	45	88
55.	15th St Charter School	2755 W 15th St	300 student middle school	486	68	57	125	24	24	48
56.	Church	968 S Berendo St	85,308 sf church	535	23	8	31	3	9	12

TABLE 3 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
57.	Equitas Charter School	2723 W 8th St	450 K-8 students	949	190	155	345	28	37	65
58.	Mixed-Use	2850 W 7th St	206 apartment units and 7,500 sf retail	1,057	20	72	92	72	42	114
59.	Residential project	2929 W Leeward Ave	80 condominium units	476	7	33	40	44	21	65
60.	6th & Virgil	2968 W 6th St	399 apartment units and 20,000 sf commercial space	2,943	73	154	227	168	93	261
61.	Residential Project	1011 S Park View St	108 apartment units	594	9	38	47	38	19	57
62.	Hotel and Restaurant	2965 W 6th St	99-room hotel and 545 sf restaurant addition	688	26	18	44	25	25	50
63.	3-story Retail and Office Building	2789 W Olympic Blvd	20,607 sf retail and 2,781 sf office	612	16	8	24	25	29	54
64.	Apartment Project	1255 E Elden Ave	103 apartment units	376	0	32	32	28	10	38
65.	Apartment Project	2859 W Francis Ave	81 apartment units	492	7	28	35	31	5	36
66.	Mixed-Use	2405 W 8th St	144 apartment units and 4,406 sf retail	333	-20	48	28	42	-15	27
67.	Mixed-Use	2900 W Wilshire Blvd	644 apartment units and 15,500 sf commercial space	3,482	81	135	216	137	81	218
68.	Mixed-Use	616 S Westmoreland Ave	77 apartment units, 2,360 sf restaurant, and 745 sf retail	446	1	30	31	31	5	36
69.	2649 San Marino Apartments	2649 W San Marino Ave	45 apartment units	246	4	15	19	15	8	23
70.	Zion Market	888 S Vermont Ave	4,400 sf office ad 47,208 sf market	2,526	45	19	64	171	169	340

TABLE 3 (cont'd)
RELATED PROJECT TRIP GENERATION ESTIMATES

No.	Project	Address	Description	Trip Generation Estimates						
				Daily	Morning Peak Hour			Afternoon Peak Hour		
					In	Out	Total	In	Out	Total
71.	Mixed-Use	2972 W 7th St	304 apartment units and 9,735 sf retail	1,018	17	99	116	76	23	99
72.	Mixed-Use	1000 S Vermont Ave	236 apartment units and 60,300 sf commercial space	2,655	39	94	133	137	102	239
73.	Mixed-Use	2870 W Olympic Blvd	78-room hotel and 16,384 sf retail/restaurant	834	22	14	36	30	28	58
74.	Olympic & Hoover Mixed-Use	2501 W Olympic Blvd	173 apartment units and 36,180 sf comercial space	1,911	27	72	99	100	73	173
75.	Mixed-Use	668 S Coronado St	122 apartment units and 1,182 sf retail	947	14	48	62	56	34	90
76.	Mixed-Use	635 Western Ave	132 apartment units and 900 sf retail	672	10	40	50	40	22	62

Notes:
Source: LADOT, June, 2017.

TABLE 4
FREEWAY SEGMENT SCREENING PROCESS
EXISTING OPERATING CONDITIONS (YEAR 2017)

Freeway Segment	Direction	Number of Lanes [a]	Capacity [b]	Volume [c]	V/C Ratio	Project Traffic	Percent of Capacity	Meets Screening Criteria? [d]
AM Peak Hour								
I-10 between Western Avenue	EB	4	8,000	6,088	0.76	2	0.03%	NO
and Normandie Avenue	WB	4	8,000	5,013	0.63	2	0.03%	NO
I-10 between Normandie Avenue	EB	4	8,000	6,929	0.87	2	0.03%	NO
and Vermont Avenue	WB	4	8,000	7,285	0.91	2	0.03%	NO
PM Peak Hour								
I-10 between Western Avenue	EB	4	8,000	4,850	0.61	5	0.06%	NO
and Normandie Avenue	WB	4	8,000	6,613	0.83	3	0.04%	NO
I-10 between Normandie Avenue	EB	4	8,000	5,668	0.71	3	0.04%	NO
and Vermont Avenue	WB	4	8,000	7,608	0.95	5	0.06%	NO

Notes

[a] Auxiliary lanes and high-occupancy vehicle (carpool) lanes are not counted toward number of lanes.

[b] Lane capacity is 2,000 vehicles per hour per lane based on specifications in the screening criteria.

[c] Existing traffic volume based on available typical weekday data for May 2017 from Caltrans' *Performance Measurement System* (PeMS).

[d] Based on the *First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures* (Caltrans & LADOT, December 2015), further analysis of Caltrans facilities would be required if the freeway segment operates at LOS D and the project's peak hour trips would result in a 2% or more increase to the freeway mainline capacity, or if the freeway segment operates at LOS E or F and the project's peak hour trips would result in a 1% or more increase to the freeway mainline capacity. The Project would not result in a 1% or more increase to the freeway mainline capacity, thus, the screening criteria would not be met regardless of the freeway mainline LOS.

TABLE 5
FREEWAY OFF-RAMP SCREENING PROCESS
EXISTING OPERATING CONDITIONS (YEAR 2017)

Freeway Off-ramp	Peak Hour	Number of Lanes	Capacity [a]	Volume [b]	V/C Ratio	Project Traffic	Percent of Capacity	Meets Screening Criteria? [c]
I-10 Eastbound Off-ramp to Normandie Avenue	AM	1	850	374	0.44	2	0.2%	NO
	PM	1	850	446	0.52	5	0.6%	NO
I-10 Westbound Off-ramp to Normandie Avenue	AM	1	850	547	0.64	2	0.2%	NO
	PM	1	850	653	0.77	5	0.6%	NO

Notes

[a] Off-ramp lane capacity is 850 vehicles per hour per lane based on specifications in the screening criteria.

[b] An ambient growth rate of 1% per year was applied to the most recent traffic volume data from *2015 Traffic Volumes on California State Highways* (Caltrans, 2016) to reflect Existing year 2017 traffic conditions.

[c] Based on the *First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures* (Caltrans & LADOT, December 2015), further analysis of Caltrans facilities would be required if the freeway off-ramp operates at LOS D and the project's peak hour trips would result in a 2% or more increase to the freeway off-ramp capacity, or if the freeway off-ramp operates at LOS E or F and the project's peak hour trips would result in a 1% or more increase to the freeway off-ramp capacity. The Project would not result in a 1% or more increase to the freeway off-ramp capacity, thus, the screening criteria would not be met regardless of the freeway off-ramp LOS.

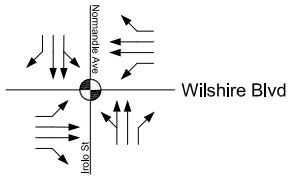
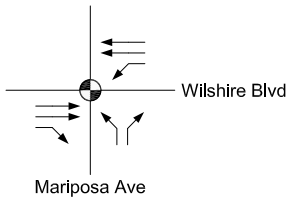
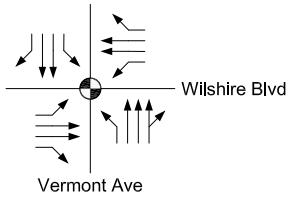
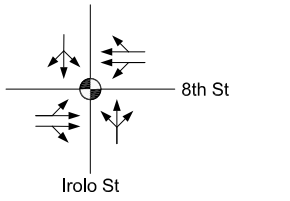
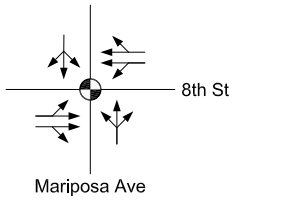
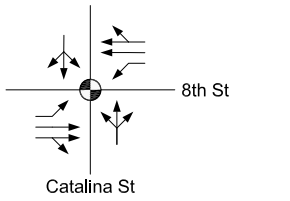
Appendix B

Intersection Lane Configurations

LEGEND

Stop sign

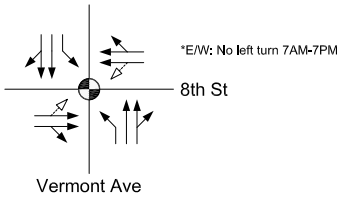
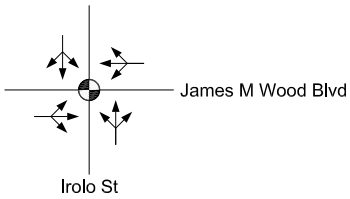
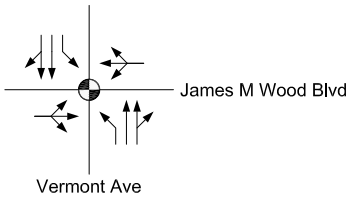
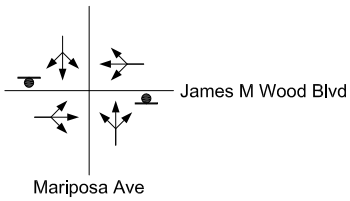
Traffic Signal

	EXISTING CONDITIONS (YEAR 2017)	FUTURE CONDITIONS (YEAR 2022)
1. Normandie Avenue / Irolo Street & Wilshire Boulevard		Same as Existing Conditions
2. Mariposa Avenue & Wilshire Boulevard		Same as Existing Conditions
3. Vermont Avenue & Wilshire Boulevard		Same as Existing Conditions
4. Irolo Street & 8th Street		Same as Existing Conditions
5. Mariposa Avenue & 8th Street		Same as Existing Conditions
6. Catalina Street & 8th Street		Same as Existing Conditions

LEGEND

Stop Sign

Traffic Signal

	EXISTING CONDITIONS (YEAR 2017)	FUTURE CONDITIONS (YEAR 2022)
7. Vermont Avenue & 8th Street		Same as Existing Conditions
8. Irolo Street & James M Wood Boulevard		Same as Existing Conditions
9. Vemont Avenue & James M Wood Boulevard		Same as Existing Conditions
10. Mariposa Avenue & James M Wood Boulevard		Same as Existing Conditions

INTERSECTION LANE CONFIGURATIONS

APPENDIX B

Appendix C

Traffic Counts

Turning Movement Count Report AM

Location ID: 1
North/South: Normandie Avenue / Irolo Street
East/West: Wilshire Boulevard
Date: 11/02/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	13	130	11	3	255	12	17	120	9	16	158	6	750
07:15	21	125	15	8	256	10	13	107	9	17	214	8	803
07:30	15	130	15	6	263	17	13	126	12	18	243	8	866
07:45	17	122	14	7	294	17	27	131	9	23	263	10	934
08:00	10	104	11	5	301	31	28	109	9	18	259	9	894
08:15	29	135	15	15	278	27	10	116	10	23	278	6	942
08:30	22	135	17	10	268	29	15	129	11	33	264	9	942
08:45	12	126	20	13	247	28	27	118	13	33	277	8	922
09:00	28	131	16	16	251	30	29	114	12	18	232	18	895
09:15	26	126	20	8	228	26	23	136	12	23	201	8	837
09:30	24	100	15	11	244	27	35	98	17	15	167	9	762
09:45	26	116	21	15	238	25	33	113	10	20	217	13	847

Total Volume:	243	1480	190	117	3123	279	270	1417	133	257	2773	112	10394
Approach %	13%	77%	10%	3%	89%	8%	15%	78%	7%	8%	88%	4%	

Peak Hr Begin:	7:45												
PHV	78	496	57	37	1141	104	80	485	39	97	1064	34	3712
PHF	0.881			0.951			0.904			0.973			0.985

Turning Movement Count Report PM

Location ID: 1
North/South: Normandie Avenue / Irolo Street
East/West: Wilshire Boulevard

Date: 11/02/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	20	122	13	15	243	30	29	120	15	22	219	15	863
15:15	12	126	7	10	221	24	31	111	10	17	231	12	812
15:30	19	94	8	12	227	28	19	120	16	16	246	18	823
15:45	17	147	9	12	250	33	31	125	10	14	239	23	910
16:00	16	138	13	10	246	29	26	132	8	26	236	17	897
16:15	16	131	12	12	238	23	33	102	14	24	259	26	890
16:30	16	117	13	19	262	19	34	143	11	13	298	22	967
16:45	15	122	18	13	278	21	27	138	15	17	225	11	900
17:00	17	138	14	24	280	37	28	147	9	12	247	16	969
17:15	19	131	16	23	311	21	16	135	18	16	285	17	1008
17:30	17	117	24	20	289	20	28	133	12	22	286	19	987
17:45	18	122	13	18	254	25	25	115	15	26	309	28	968

Total Volume:	202	1505	160	188	3099	310	327	1521	153	225	3080	224	10994
Approach %	11%	81%	9%	5%	86%	9%	16%	76%	8%	6%	87%	6%	

Peak Hr Begin:	17:00												
PHV	71	508	67	85	1134	103	97	530	54	76	1127	80	3932
PHF	0.956			0.931			0.925			0.884			0.975

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	27	2	62	0	0	0	18	1
07:15	37	0	74	0	0	0	32	3
07:30	58	0	70	0	2	0	32	1
07:45	33	1	74	0	0	0	47	1
08:00	36	1	73	1	1	0	20	0
08:15	37	2	73	0	0	0	27	2
08:30	57	2	63	0	4	1	40	2
08:45	74	1	72	0	1	0	35	2
09:00	53	1	44	0	3	0	34	0
09:15	51	3	67	0	0	0	26	0
09:30	29	7	61	0	2	0	30	2
09:45	41	5	63	3	0	1	45	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	47	1	59	0	32	0	35	1
15:15	36	1	51	1	33	0	24	0
15:30	58	1	73	0	22	0	43	0
15:45	61	2	53	1	0	0	58	0
16:00	63	1	71	3	0	5	61	2
16:15	46	0	35	0	4	2	45	3
16:30	38	1	44	0	2	4	29	0
16:45	40	4	41	1	4	3	42	0
17:00	61	2	57	1	0	0	48	0
17:15	74	0	70	0	2	0	54	3
17:30	64	2	52	2	1	0	57	1
17:45	77	2	55	0	0	1	53	1

Turning Movement Count Report AM

Location ID: 2
North/South: Mariposa Ave
East/West: Wilshire Blvd

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	0	0	0	0	249	20	28	0	12	24	155	0	488
07:15	0	0	0	0	263	16	34	0	14	30	231	0	588
07:30	0	0	0	0	260	16	30	0	33	31	301	0	671
07:45	0	0	0	0	279	22	64	0	32	66	320	0	783
08:00	0	0	0	0	270	19	66	0	44	59	315	0	773
08:15	0	0	0	0	323	23	51	0	28	50	282	0	757
08:30	0	0	0	0	282	26	40	0	38	63	303	0	752
08:45	0	0	0	0	289	29	32	0	30	69	269	0	718
09:00	0	0	0	0	257	23	33	0	22	56	222	0	613
09:15	0	0	0	0	228	22	23	0	13	41	225	0	552
09:30	0	0	0	0	242	22	32	0	27	41	226	0	590
09:45	0	0	0	0	266	21	19	0	16	40	215	0	577
Total Volume:	0	0	0	0	3208	259	452	0	309	570	3064	0	7862
Approach %	0%	0%	0%	0%	93%	7%	59%	0%	41%	16%	84%	0%	
Peak Hr Begin:	7:45												
PHV	0	0	0	0	1154	90	221	0	142	238	1220	0	3065
PHF	0.000			0.899			0.825			0.944			0.979

Turning Movement Count Report PM

Location ID: 2
North/South: Mariposa Ave
East/West: Wilshire Blvd

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	0	0	0	0	267	17	52	0	37	45	276	0	694
15:15	0	0	0	0	247	26	41	0	41	38	266	0	659
15:30	0	0	0	0	284	25	35	0	37	38	270	0	689
15:45	0	0	0	0	266	26	35	0	32	43	277	0	679
16:00	0	0	0	0	260	19	44	0	43	62	280	0	708
16:15	0	0	0	0	248	20	48	0	49	40	280	0	685
16:30	0	0	0	0	261	23	38	0	45	51	315	0	733
16:45	0	0	0	0	272	16	33	0	45	36	258	0	660
17:00	0	0	0	0	300	23	37	0	59	63	303	0	785
17:15	0	0	0	0	290	28	42	0	50	61	283	0	754
17:30	0	0	0	0	290	26	37	0	48	55	276	0	732
17:45	0	0	0	0	301	21	44	0	39	43	288	0	736
Total Volume:	0	0	0	0	3286	270	486	0	525	575	3372	0	8514
Approach %	0%	0%	0%	0%	92%	8%	48%	0%	52%	15%	85%	0%	
Peak Hr Begin:	17:00												
PHV	0	0	0	0	1181	98	160	0	196	222	1150	0	3007
PHF	0.000			0.990			0.927			0.937			0.958

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	0	0	26	1	13	2	0	0
07:15	0	0	21	0	10	1	1	0
07:30	0	0	30	2	16	2	2	0
07:45	0	0	49	2	31	4	0	0
08:00	0	0	49	1	17	3	0	0
08:15	0	0	55	2	22	1	0	0
08:30	0	0	50	1	27	1	0	0
08:45	0	0	63	0	22	3	0	0
09:00	0	0	64	2	18	1	1	0
09:15	0	0	57	0	19	1	1	0
09:30	0	0	57	2	20	1	0	0
09:45	0	0	47	0	26	1	0	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	0	0	76	0	22	3	1	0
15:15	0	0	86	2	51	2	0	0
15:30	0	0	75	0	52	1	0	0
15:45	0	0	59	2	33	1	1	0
16:00	0	0	72	1	34	4	0	0
16:15	0	0	59	3	31	1	1	0
16:30	0	0	58	1	23	4	0	0
16:45	0	0	81	0	21	2	2	1
17:00	0	0	75	2	27	5	0	1
17:15	0	0	46	0	25	5	0	0
17:30	0	0	59	4	20	6	0	0
17:45	0	0	67	1	24	1	0	0

Turning Movement Count Report AM

Location ID: 3
North/South: Vermont Avenue
East/West: Wilshire Blvd

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	30	251	25	7	252	17	9	271	33	17	173	23	1108
07:15	25	269	24	13	213	23	5	297	24	26	158	33	1110
07:30	33	310	29	15	235	22	8	288	19	34	225	21	1239
07:45	27	251	26	11	240	22	23	283	29	43	247	37	1239
08:00	27	278	33	14	262	27	18	276	25	49	236	29	1274
08:15	28	239	44	25	244	33	19	243	35	28	227	27	1192
08:30	26	262	45	15	238	24	20	220	36	31	233	25	1175
08:45	32	276	37	20	261	29	22	214	35	28	199	31	1184
09:00	48	234	47	13	234	24	17	242	31	24	221	22	1157
09:15	34	235	32	17	232	30	25	239	37	31	174	31	1117
09:30	27	269	42	16	215	27	19	252	36	29	168	24	1124
09:45	33	236	29	23	233	27	18	243	39	35	220	21	1157
Total Volume:	370	3110	413	189	2859	305	203	3068	379	375	2481	324	14076
Approach %	10%	80%	11%	6%	85%	9%	6%	84%	10%	12%	78%	10%	
Peak Hr Begin:	7:30												
PHV	115	1078	132	65	981	104	68	1090	108	154	935	114	4944
PHF	0.890			0.949			0.945			0.920			0.970

Turning Movement Count Report PM

Location ID: 3
North/South: Vermont Avenue
East/West: Wilshire Blvd

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	21	258	26	24	170	31	26	247	32	34	223	29	1121
15:15	30	238	42	15	175	29	25	212	34	43	225	48	1116
15:30	31	252	34	27	237	45	23	238	37	30	207	23	1184
15:45	20	255	39	25	194	32	15	230	24	28	250	35	1147
16:00	31	239	22	22	223	42	17	254	32	25	188	34	1129
16:15	32	266	34	22	205	27	20	225	26	30	226	41	1154
16:30	25	259	31	27	215	41	31	231	20	36	244	27	1187
16:45	12	223	17	24	216	42	22	263	26	36	230	32	1143
17:00	15	280	36	15	242	40	10	256	27	34	226	27	1208
17:15	19	249	26	20	243	35	14	257	27	25	219	26	1160
17:30	14	221	35	15	229	34	12	238	23	22	205	32	1080
17:45	12	201	28	16	223	34	15	235	19	21	211	29	1044

Total Volume:	262	2941	370	252	2572	432	230	2886	327	364	2654	383	13673
Approach %	7%	82%	10%	8%	79%	13%	7%	84%	9%	11%	78%	11%	

Peak Hr Begin:	16:30												
PHV	71	1011	110	86	916	158	77	1007	100	131	919	112	4698
PHF	0.900			0.973			0.952			0.946			0.972

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	149	0	89	2	129	2	45	2
07:15	116	5	129	3	136	3	40	4
07:30	150	1	138	3	149	0	51	1
07:45	179	2	123	4	189	2	45	1
08:00	206	5	133	6	168	1	67	5
08:15	166	6	124	3	169	4	46	4
08:30	178	2	147	0	184	0	66	1
08:45	164	2	145	4	155	2	49	3
09:00	150	4	141	7	131	1	43	2
09:15	136	8	155	3	121	1	57	5
09:30	126	2	126	0	105	2	49	1
09:45	101	3	91	5	98	1	25	4

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	137	9	189	5	159	5	66	6
15:15	143	13	147	3	126	2	52	2
15:30	210	8	169	3	186	1	83	0
15:45	216	9	153	5	178	4	94	4
16:00	173	7	149	4	156	2	77	2
16:15	152	4	154	2	157	3	71	2
16:30	214	7	194	6	168	2	75	2
16:45	154	4	164	6	174	1	123	5
17:00	174	4	187	6	165	4	89	2
17:15	192	4	186	5	185	2	84	3
17:30	195	7	168	2	159	5	76	4
17:45	178	3	158	5	126	5	68	5

Turning Movement Count Report AM

Location ID: 4
North/South: Irolo Street
East/West: 8th Street

Date: 11/19/15
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	9	98	8	5	229	13	4	137	11	13	90	7	624
07:15	8	109	9	4	233	4	4	145	7	14	132	2	671
07:30	5	140	11	8	258	7	6	125	16	15	157	7	755
07:45	8	99	4	12	199	8	9	147	14	14	162	4	680
08:00	4	137	11	15	176	17	8	136	19	18	177	7	725
08:15	14	140	17	11	165	12	3	149	14	15	179	4	723
08:30	11	111	9	13	205	7	8	153	9	20	207	7	760
08:45	9	96	12	8	225	5	4	138	27	10	189	9	732
09:00	11	110	2	9	216	9	8	126	17	13	158	8	687
09:15	9	117	10	5	185	7	3	127	15	11	170	14	673
09:30	8	108	2	6	196	8	10	141	14	14	142	12	661
09:45	10	118	6	15	188	4	9	135	15	18	154	10	682

Total Volume:	106	1383	101	111	2475	101	76	1659	178	175	1917	91	8373
Approach %	7%	87%	6%	4%	92%	4%	4%	87%	9%	8%	88%	4%	

Peak Hr Begin:	8:00												
PHV	38	484	49	47	771	41	23	576	69	63	752	27	2940
PHF	0.835			0.902			0.982			0.900			0.967

Turning Movement Count Report PM

Location ID: 4
North/South: Irolo Street
East/West: 8th Street

Date: 11/19/15
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	12	138	12	9	112	10	7	125	17	15	135	5	597
15:15	4	136	5	12	132	8	12	114	14	22	176	8	643
15:30	9	141	8	10	128	10	9	134	15	19	178	11	672
15:45	1	139	16	9	163	17	7	126	16	20	218	7	739
16:00	8	129	4	14	182	9	5	122	11	23	190	11	708
16:15	8	135	12	9	135	19	5	138	7	13	204	12	697
16:30	3	137	7	7	165	19	9	136	10	18	190	9	710
16:45	7	113	11	13	161	8	3	128	11	14	232	9	710
17:00	7	128	9	15	145	8	6	133	12	14	214	3	694
17:15	4	110	11	5	195	13	9	102	15	23	237	7	731
17:30	4	108	6	13	214	14	9	115	11	17	238	15	764
17:45	11	109	8	13	218	13	8	114	12	s	222	7	735

Total Volume:	78	1523	109	129	1950	148	89	1487	151	198	2434	104	8400
Approach %	5%	89%	6%	6%	88%	7%	5%	86%	9%	7%	89%	4%	

Peak Hr Begin:	17:00												
PHV	26	455	34	46	772	48	32	464	50	54	911	32	2924
PHF	0.894			0.887			0.904			0.923			0.957

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	23	0	33	2	40	0	20	0
07:15	40	0	31	0	62	0	24	0
07:30	50	0	40	1	76	0	40	0
07:45	51	4	22	2	69	6	38	2
08:00	41	2	33	0	57	1	26	1
08:15	35	0	20	0	52	4	33	0
08:30	24	0	27	1	57	3	23	1
08:45	17	1	24	1	54	2	22	2
09:00	17	1	18	1	45	0	30	0
09:15	24	0	22	1	41	3	27	2
09:30	18	1	31	1	39	6	24	4
09:45	21	1	28	1	50	3	18	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	45	1	26	1	36	1	41	2
15:15	16	5	24	1	54	3	27	1
15:30	43	3	28	1	79	3	35	3
15:45	52	5	23	4	75	4	49	1
16:00	44	2	26	0	64	5	27	3
16:15	49	2	60	0	86	3	40	0
16:30	20	3	32	5	82	3	43	2
16:45	43	4	55	2	105	2	43	0
17:00	37	2	40	2	94	3	38	3
17:15	40	4	65	1	108	3	48	2
17:30	40	0	50	5	94	3	46	1
17:45	41	6	39	4	101	3	52	7

Turning Movement Count Report AM

Location ID: 5
North/South: Mariposa Ave
East/West: 8th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	13	6	18	12	194	0	3	11	1	6	119	1	384
07:15	8	7	21	9	223	2	1	11	2	7	133	0	424
07:30	8	13	22	26	230	11	6	22	4	1	182	5	530
07:45	21	15	23	40	175	10	7	27	5	3	213	10	549
08:00	23	14	28	54	213	8	8	19	2	6	200	7	582
08:15	6	5	15	37	206	10	4	11	1	6	200	10	511
08:30	1	7	24	33	246	3	1	27	1	2	166	7	518
08:45	7	10	22	32	194	4	5	26	1	2	170	9	482
09:00	19	4	11	30	198	0	4	9	1	5	151	7	439
09:15	13	7	26	18	180	2	3	11	1	2	143	4	410
09:30	7	12	14	20	191	4	4	13	1	2	134	7	409
09:45	12	9	21	25	190	4	5	9	2	1	125	8	411
Total Volume:	138	109	245	336	2440	58	51	196	22	43	1936	75	5649
Approach %	28%	22%	50%	12%	86%	2%	19%	73%	8%	2%	94%	4%	
Peak Hr Begin:	7:30												
PHV	58	47	88	157	824	39	25	79	12	16	795	32	2172
PHF	0.742			0.927			0.744			0.933			0.933

Turning Movement Count Report PM

Location ID: 5
North/South: Mariposa Ave
East/West: 8th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	12	11	40	20	179	5	5	10	0	7	186	5	480
15:15	17	16	34	26	177	3	5	9	2	3	172	5	469
15:30	10	14	32	19	176	4	4	14	3	1	185	6	468
15:45	15	16	38	16	160	2	3	5	4	1	209	8	477
16:00	15	18	36	22	169	2	3	7	1	4	193	7	477
16:15	11	20	42	19	174	4	3	19	3	4	224	8	531
16:30	15	15	32	21	188	5	3	20	2	3	187	4	495
16:45	12	13	40	11	214	3	8	11	2	4	234	7	559
17:00	19	21	54	28	189	1	6	6	4	5	240	6	579
17:15	16	26	49	30	220	4	10	17	3	4	207	5	591
17:30	18	13	39	29	221	8	2	13	5	6	246	4	604
17:45	11	16	47	18	180	5	3	16	3	11	209	11	530
Total Volume:	171	199	483	259	2247	46	55	147	32	53	2492	76	6260
Approach %	20%	23%	57%	10%	88%	2%	24%	63%	14%	2%	95%	3%	
Peak Hr Begin:	16:45												
PHV	65	73	182	98	844	16	26	47	14	19	927	22	2333
PHF	0.851			0.928			0.725			0.945			0.966

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	21	0	5	2	14	1	7	0
07:15	24	0	11	0	18	0	12	0
07:30	92	1	34	0	27	0	17	0
07:45	192	2	56	0	83	3	34	0
08:00	158	0	47	1	51	2	14	0
08:15	73	0	36	0	34	1	8	0
08:30	32	3	20	0	33	2	19	1
08:45	24	2	8	1	22	1	12	4
09:00	37	2	14	1	22	1	18	0
09:15	23	2	10	0	17	0	14	0
09:30	18	2	10	1	23	3	13	1
09:45	15	1	9	1	30	2	4	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	138	3	36	1	63	1	38	2
15:15	84	2	21	0	57	1	20	3
15:30	57	7	19	0	61	4	21	3
15:45	65	2	17	0	35	0	14	0
16:00	46	6	15	0	34	4	23	1
16:15	42	3	19	0	16	3	19	0
16:30	29	2	12	1	39	2	8	1
16:45	36	4	16	1	23	3	17	1
17:00	39	10	20	0	48	0	31	0
17:15	31	1	16	0	42	2	15	0
17:30	46	1	33	2	58	1	18	0
17:45	63	2	27	1	57	3	18	2

Turning Movement Count Report AM

Location ID: 6
North/South: Catalina St
East/West: 8th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	20	16	9	7	209	4	1	35	9	3	123	16	452
07:15	36	14	5	19	231	5	7	43	10	3	137	18	528
07:30	42	17	9	12	245	14	11	47	28	2	180	17	624
07:45	31	22	11	8	279	9	14	27	31	7	197	18	654
08:00	35	33	16	7	215	12	16	36	22	10	214	22	638
08:15	45	25	20	16	206	13	11	27	17	3	215	12	610
08:30	30	32	9	9	250	11	12	50	11	9	193	15	631
08:45	29	35	12	13	206	7	4	49	10	6	173	17	561
09:00	27	27	12	3	192	5	7	39	7	4	162	15	500
09:15	48	31	10	6	157	13	4	40	8	6	164	14	501
09:30	40	20	9	5	183	7	8	40	6	4	139	15	476
09:45	31	32	6	9	184	14	5	39	7	6	139	13	485
Total Volume:	414	304	128	114	2557	114	100	472	166	63	2036	192	6660
Approach %	49%	36%	15%	4%	92%	4%	14%	64%	22%	3%	89%	8%	
Peak Hr Begin:	7:45												
PHV	141	112	56	40	950	45	53	140	81	29	819	67	2533
PHF	0.858			0.874			0.926			0.930			0.968

Turning Movement Count Report PM

Location ID: 6
North/South: Catalina St
East/West: 8th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	31	44	9	14	156	23	7	51	11	7	218	26	597
15:15	31	42	10	13	169	10	20	38	7	9	216	25	590
15:30	30	42	16	9	154	17	8	44	8	14	209	13	564
15:45	25	41	7	2	140	19	13	45	10	7	220	31	560
16:00	33	47	9	8	153	15	5	48	5	3	235	20	581
16:15	28	49	12	9	172	11	11	52	9	8	256	23	640
16:30	43	59	15	10	168	23	8	50	9	4	214	21	624
16:45	32	64	9	5	199	10	6	44	8	15	227	27	646
17:00	36	73	13	7	193	24	10	58	7	10	267	24	722
17:15	47	78	18	3	215	12	8	41	10	9	228	20	689
17:30	50	67	16	12	207	21	6	73	14	11	240	25	742
17:45	39	69	14	9	171	15	10	59	5	16	235	28	670

Total Volume:	425	675	148	101	2097	200	112	603	103	113	2765	283	7625
Approach %	34%	54%	12%	4%	87%	8%	14%	74%	13%	4%	87%	9%	

Peak Hr Begin:	17:00												
PHV	172	287	61	31	786	72	34	231	36	46	970	97	2823
PHF	0.909			0.926			0.809			0.924			0.951

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	17	1	22	0	8	3	12	0
07:15	33	2	23	1	25	1	6	0
07:30	90	4	69	0	35	1	17	0
07:45	244	2	101	1	90	4	48	2
08:00	184	14	53	2	55	2	32	0
08:15	114	1	36	0	41	0	18	0
08:30	38	3	25	2	35	2	12	2
08:45	10	3	14	2	13	0	13	1
09:00	17	1	17	0	25	0	15	0
09:15	22	6	12	0	13	2	16	2
09:30	16	2	15	0	15	4	11	1
09:45	34	4	14	0	18	2	15	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	188	5	55	2	49	2	19	0
15:15	108	3	58	5	40	2	38	2
15:30	69	4	48	0	30	5	28	2
15:45	32	8	26	1	37	1	20	4
16:00	21	6	24	1	29	1	15	0
16:15	23	5	21	1	35	1	14	2
16:30	34	4	26	2	23	4	18	2
16:45	30	10	35	5	23	4	15	1
17:00	38	5	33	0	32	0	26	2
17:15	57	1	26	1	33	0	18	0
17:30	52	0	52	1	42	1	29	0
17:45	63	2	34	1	40	1	21	2

Turning Movement Count Report AM

Location ID: 7
North/South: Vermont Avenue
East/West: 8th Street

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	20	239	12	27	161	0	27	301	4	18	79	0	888
07:15	19	268	11	23	172	0	17	330	1	23	102	0	966
07:30	22	305	15	15	224	0	22	307	4	20	149	0	1083
07:45	23	302	11	15	215	1	21	303	2	12	163	0	1068
08:00	16	287	20	19	179	0	19	324	15	27	167	1	1074
08:15	14	268	13	15	180	0	16	276	7	31	194	0	1014
08:30	11	264	14	16	155	0	8	278	16	17	173	0	952
08:45	9	274	16	12	196	0	19	289	6	23	160	1	1005
09:00	8	257	9	14	170	1	17	281	10	20	146	0	933
09:15	13	264	10	10	170	0	12	297	7	22	116	2	923
09:30	23	278	11	17	143	0	22	301	7	24	119	0	945
09:45	19	283	12	21	171	1	22	287	10	23	112	0	961

Total Volume:	197	3289	154	204	2136	3	222	3574	89	260	1680	4	11812
Approach %	5%	90%	4%	9%	91%	0%	6%	92%	2%	13%	86%	0%	

Peak Hr Begin:	7:30												
PHV	75	1162	59	64	798	1	78	1210	28	90	673	1	4239
PHF	0.947			0.903			0.919			0.849			0.979

Turning Movement Count Report PM

Location ID: 7
North/South: Vermont Avenue
East/West: 8th Street

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	27	278	17	10	115	0	14	263	14	27	137	2	904
15:15	32	294	15	19	123	0	18	272	17	36	160	0	986
15:30	21	285	18	18	118	0	13	228	17	35	202	0	955
15:45	22	287	17	20	114	2	21	288	15	25	175	0	986
16:00	32	280	12	20	133	2	15	270	15	30	177	1	987
16:15	20	290	14	15	131	3	13	296	15	26	192	0	1015
16:30	25	298	18	12	136	0	12	275	12	21	203	1	1013
16:45	20	314	17	24	163	0	16	266	12	23	225	0	1080
17:00	13	300	14	29	174	0	14	265	20	33	198	0	1060
17:15	23	299	13	25	170	0	14	272	17	33	207	2	1075
17:30	28	258	17	24	194	0	19	297	9	31	196	1	1074
17:45	25	271	14	24	177	0	20	273	17	23	205	2	1051

Total Volume:	288	3454	186	240	1748	7	189	3265	180	343	2277	9	12186
Approach %	7%	88%	5%	12%	88%	0%	5%	90%	5%	13%	87%	0%	

Peak Hr Begin:	16:45												
PHV	84	1171	61	102	701	0	63	1100	58	120	826	3	4289
PHF	0.937			0.921			0.939			0.957			0.993

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	23	3	28	1	22	1	18	3
07:15	29	1	24	3	26	1	28	3
07:30	54	0	39	2	24	2	33	1
07:45	77	3	52	2	34	1	33	4
08:00	63	2	34	2	39	1	39	0
08:15	65	3	46	1	51	0	25	1
08:30	34	4	37	0	32	2	23	3
08:45	27	2	27	1	26	1	23	1
09:00	22	0	39	0	28	3	24	1
09:15	32	1	30	2	30	1	20	3
09:30	32	0	45	1	33	1	22	2
09:45	28	2	43	2	33	2	23	3

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	48	3	43	3	35	1	39	1
15:15	49	1	58	2	38	3	53	4
15:30	65	0	51	4	51	0	68	4
15:45	68	3	66	2	61	4	70	2
16:00	58	1	70	1	66	1	64	2
16:15	67	4	66	1	64	5	62	1
16:30	56	1	81	0	61	4	63	4
16:45	78	6	70	5	56	3	50	4
17:00	65	2	48	3	52	2	74	1
17:15	72	1	71	1	62	2	67	5
17:30	89	3	68	4	57	3	93	3
17:45	94	4	74	2	59	1	58	5

Turning Movement Count Report AM

Location ID: 8
North/South: Irolo Street
East/West: 9th Street / James M Wood Avenue

Date: 11/19/15
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	8	108	5	10	41	7	4	146	8	8	33	0	378
07:15	7	121	2	9	49	7	2	144	8	5	44	6	404
07:30	3	158	5	8	55	8	0	131	3	11	57	2	441
07:45	8	120	6	8	68	7	2	152	3	21	87	7	489
08:00	4	164	1	11	60	13	0	145	5	14	70	8	495
08:15	7	151	4	9	55	11	1	147	7	19	90	5	506
08:30	5	129	6	7	40	6	2	150	2	21	75	3	446
08:45	5	114	5	7	42	8	2	154	6	15	66	5	429
09:00	3	119	6	4	44	4	3	138	5	13	79	4	422
09:15	7	122	3	5	45	6	2	130	2	7	61	5	395
09:30	3	133	5	8	40	9	7	149	6	10	50	9	429
09:45	6	126	5	5	43	12	4	145	5	14	61	4	430

Total Volume:	66	1565	53	91	582	98	29	1731	60	158	773	58	5264
Approach %	4%	93%	3%	12%	75%	13%	2%	95%	3%	16%	78%	6%	

Peak Hr Begin:	7:45												
PHV	24	564	17	35	223	37	5	594	17	75	322	23	1936
PHF	0.895			0.878			0.981			0.913			0.957

Turning Movement Count Report PM

Location ID: 8
North/South: Irolo Street
East/West: 9th Street / James M Wood Avenue
Date: 11/19/15
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	0	156	6	13	42	12	5	130	6	13	72	3	458
15:15	3	159	0	12	49	6	1	125	9	13	66	5	448
15:30	2	157	11	11	37	5	3	146	2	25	75	4	478
15:45	5	162	3	4	42	3	2	150	3	18	87	6	485
16:00	5	153	6	4	51	2	4	125	6	17	74	6	453
16:15	4	160	6	7	60	1	5	144	1	23	76	5	492
16:30	2	160	3	14	55	8	5	145	4	18	91	3	508
16:45	5	136	3	17	54	5	3	137	5	18	88	9	480
17:00	2	143	4	8	55	5	6	148	6	10	65	2	454
17:15	1	143	8	13	70	6	2	120	3	13	99	8	486
17:30	1	119	8	13	59	5	4	115	4	19	102	6	455
17:45	2	140	1	10	62	7	5	131	5	15	101	4	483

Total Volume:	32	1788	59	126	636	65	45	1616	54	202	996	61	5680
Approach %	2%	95%	3%	15%	77%	8%	3%	94%	3%	16%	79%	5%	

Peak Hr Begin:	15:45												
PHV	16	635	18	29	208	14	16	564	14	76	328	20	1938
PHF	0.984			0.815			0.958			0.946			0.954

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	4	0	9	3	9	0	22	0
07:15	11	0	16	0	5	1	15	0
07:30	27	0	25	3	9	0	26	0
07:45	18	1	24	2	13	4	35	2
08:00	19	1	15	1	6	0	17	0
08:15	8	0	6	0	3	0	15	0
08:30	6	0	14	0	6	0	7	0
08:45	11	1	11	2	8	1	22	0
09:00	1	0	8	0	8	0	11	0
09:15	9	5	3	0	2	1	9	4
09:30	3	2	20	1	10	0	7	1
09:45	15	4	9	0	9	0	13	1

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	2	3	5	3	4	1	5	3
15:15	25	0	9	0	4	1	25	1
15:30	15	3	14	1	8	0	22	4
15:45	9	1	5	2	11	2	27	1
16:00	9	3	18	1	13	1	25	1
16:15	5	3	30	2	9	2	23	3
16:30	11	1	16	1	7	0	13	2
16:45	8	1	15	1	4	2	18	0
17:00	12	1	12	2	6	0	33	3
17:15	23	3	17	0	5	0	22	3
17:30	19	0	14	3	5	0	21	3
17:45	14	2	20	2	8	0	26	2

Turning Movement Count Report AM

Location ID: 9
North/South: Vermont Avenue
East/West: 9th Street / James M Wood Avenue

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	6	240	8	9	42	6	10	338	16	9	29	11	724
07:15	7	273	14	9	43	7	7	352	12	11	45	6	786
07:30	5	300	12	11	45	6	9	319	17	12	76	5	817
07:45	7	278	19	17	65	5	12	325	25	12	75	8	848
08:00	4	276	18	12	44	7	16	321	21	19	91	8	837
08:15	5	273	28	8	63	11	10	301	13	10	86	2	810
08:30	5	262	18	15	55	10	5	270	16	14	75	15	760
08:45	3	267	21	5	45	5	11	339	26	9	78	4	813
09:00	8	254	16	7	52	12	9	299	22	12	62	5	758
09:15	4	262	22	11	52	8	11	305	15	15	42	7	754
09:30	9	264	14	10	38	8	9	318	17	7	36	6	736
09:45	14	282	17	7	47	9	10	316	12	11	44	4	773

Total Volume:	77	3231	207	121	591	94	119	3803	212	141	739	81	9416
Approach %	2%	92%	6%	15%	73%	12%	3%	92%	5%	15%	77%	8%	

Peak Hr Begin:	7:30												
PHV	21	1127	77	48	217	29	47	1266	76	53	328	23	3312
PHF	0.966			0.845			0.959			0.856			0.976

Turning Movement Count Report PM

Location ID: 9
North/South: Vermont Avenue
East/West: 9th Street / James M Wood Avenue

Date: 04/06/16
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	11	272	16	9	44	10	15	281	17	16	51	10	752
15:15	17	286	19	6	42	7	18	299	15	16	59	13	797
15:30	6	285	16	9	42	11	20	267	11	19	77	2	765
15:45	11	288	14	8	43	10	19	296	14	15	78	9	805
16:00	11	281	16	10	64	6	18	283	14	8	64	9	784
16:15	9	292	27	10	40	7	16	317	13	21	71	11	834
16:30	13	289	12	10	57	9	14	299	12	17	75	5	812
16:45	19	286	18	14	59	6	20	301	13	13	63	7	819
17:00	12	290	18	13	60	14	18	286	18	17	89	3	838
17:15	19	300	20	6	54	7	16	282	15	16	74	13	822
17:30	9	226	12	21	69	10	26	301	18	17	81	4	794
17:45	9	277	24	12	56	12	24	294	17	14	83	5	827
Total Volume:	146	3372	212	128	630	109	224	3506	177	189	865	91	9649
Approach %	4%	90%	6%	15%	73%	13%	6%	90%	5%	17%	76%	8%	
Peak Hr Begin:	16:15												
PHV	53	1157	75	47	216	36	68	1203	56	68	298	26	3303
PHF	0.979			0.859			0.959			0.899			0.985

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	5	1	9	1	4	1	13	0
07:15	8	2	11	3	2	0	6	4
07:30	14	2	17	0	10	0	10	1
07:45	30	1	18	1	23	1	18	2
08:00	22	2	29	2	10	1	6	1
08:15	13	4	23	3	5	1	6	2
08:30	7	0	17	3	9	0	12	3
08:45	6	2	13	1	11	0	7	3
09:00	9	2	17	1	8	1	9	1
09:15	10	1	16	0	2	2	15	0
09:30	12	3	20	1	8	1	10	1
09:45	17	3	24	4	7	1	14	3

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	18	4	13	5	11	1	16	0
15:15	20	2	12	2	13	0	25	3
15:30	19	1	20	2	14	1	29	5
15:45	25	3	11	4	13	1	28	4
16:00	30	2	17	0	19	1	42	0
16:15	23	2	14	2	20	1	26	0
16:30	35	1	22	3	7	1	20	1
16:45	28	0	21	1	14	0	24	5
17:00	30	1	12	1	16	4	46	4
17:15	34	3	31	3	24	0	27	0
17:30	24	0	22	1	35	2	35	4
17:45	29	0	32	2	22	0	24	4

Turning Movement Count Report AM

Location ID: 10
North/South: Mariposa Ave
East/West: 9th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
07:00	4	2	1	7	51	1	1	4	0	2	58	2	133
07:15	2	3	2	3	63	0	4	5	1	1	57	5	146
07:30	6	12	6	8	66	0	2	5	1	1	83	8	198
07:45	6	6	9	12	76	3	1	12	0	2	84	6	217
08:00	5	9	7	9	73	4	3	10	0	2	122	9	253
08:15	9	5	8	3	59	1	0	4	0	2	92	4	187
08:30	7	4	2	7	69	3	2	7	0	1	107	14	223
08:45	5	6	4	9	53	2	0	9	1	0	90	14	193
09:00	6	4	1	5	54	1	1	4	0	0	68	7	151
09:15	3	3	4	4	55	1	0	4	1	3	67	5	150
09:30	3	6	5	5	45	0	1	5	0	0	69	8	147
09:45	5	8	4	4	61	0	2	2	1	0	71	7	165

Total Volume:	61	68	53	76	725	16	17	71	5	14	968	89	2163
Approach %	34%	37%	29%	9%	89%	2%	18%	76%	5%	1%	90%	8%	

Peak Hr Begin:	7:45												
PHV	27	24	26	31	277	11	6	33	0	7	405	33	880
PHF	0.875			0.876			0.750			0.836			0.870

Turning Movement Count Report PM

Location ID: 10
North/South: Mariposa Ave
East/West: 9th St

Date: 06/06/17
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	7	10	5	4	56	1	0	8	0	1	91	6	189
15:15	8	6	5	6	56	2	2	8	0	2	88	3	186
15:30	6	7	6	8	61	2	0	9	0	0	75	5	179
15:45	2	12	3	2	62	4	2	3	0	2	72	6	170
16:00	6	9	7	5	66	2	0	4	2	3	78	4	186
16:15	5	14	6	7	66	2	1	9	0	3	114	4	231
16:30	5	8	6	13	60	4	3	7	2	4	96	5	213
16:45	7	12	3	8	77	4	1	7	2	5	93	9	228
17:00	7	6	5	8	77	4	3	4	1	0	97	2	214
17:15	6	22	6	12	86	4	2	7	2	1	85	6	239
17:30	11	14	1	10	80	4	2	5	0	7	101	5	240
17:45	11	12	3	5	86	7	6	12	0	3	95	4	244

Total Volume:	81	132	56	88	833	40	22	83	9	31	1085	59	2519
Approach %	30%	49%	21%	9%	87%	4%	19%	73%	8%	3%	92%	5%	

Peak Hr Begin:	17:00												
PHV	35	54	15	35	329	19	13	28	3	11	378	17	937
PHF	0.765			0.939			0.611			0.898			0.960

Pedestrian/Bicycle Count Report

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
07:00	1	0	3	0	1	0	1	0
07:15	4	0	6	0	9	0	6	0
07:30	18	0	7	0	10	0	17	0
07:45	8	1	10	0	4	1	9	0
08:00	16	0	11	0	4	0	6	0
08:15	9	0	5	0	4	0	1	0
08:30	11	0	5	0	5	0	3	0
08:45	5	1	1	0	3	1	0	1
09:00	4	0	2	0	2	0	1	0
09:15	8	1	2	0	6	1	8	0
09:30	3	0	2	0	4	0	3	0
09:45	2	0	0	0	2	1	5	0

	North		East		South		West	
Leg:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	1	0	1	0	5	1	12	0
15:15	8	0	7	0	5	0	4	0
15:30	2	0	3	0	9	0	11	0
15:45	8	2	2	0	8	0	1	0
16:00	6	0	1	0	6	0	7	0
16:15	5	0	2	0	12	0	6	1
16:30	8	0	6	0	1	2	7	0
16:45	6	1	7	0	6	1	4	0
17:00	10	2	5	0	2	1	12	0
17:15	11	0	2	0	7	1	1	0
17:30	9	1	2	0	9	1	2	0
17:45	10	1	3	0	8	0	5	0

Appendix D

Level of Service Worksheets

Morning Peak Hour

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Normandie Avenue / Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
1	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			3			3			3				3					3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		0	NB-- 3 SB--		0	NB-- 3 SB--		0		NB-- 3 SB--		0		NB-- 3 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	39	0	**39**	1	40	**40**	27	68	0	**68**	1	69	0	**69**	0	69	0	**69**
	Left-Through		1							1				1				1	
	Through	490	1	284	3	493	287	160	675	1	474	3	678	1	477	0	678	1	477
	Through-Right		0							0				0				0	
	Right	81	1	0	0	81	0	11	96	1	0	0	96	1	0	0	96	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	58	0	58	0	58	58	45	106	0	106	0	106	0	106	0	106	0	106
	Left-Through		1							1				1				1	
	Through	501	1	**309**	4	505	**311**	122	649	1	**537**	4	653	1	**539**	0	653	1	**539**
	Through-Right		0							0				0				0	
	Right	79	1	62	0	79	62	15	98	1	24	0	98	1	24	0	98	1	24
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	34	1	34	0	34	34	113	149	1	**149**	0	149	1	**149**	0	149	1	**149**
	Left-Through		0							0				0				0	
	Through	1075	2	**538**	1	1076	**538**	244	1374	2	687	1	1375	2	688	0	1375	2	688
	Through-Right		0							0				0				0	
	Right	98	1	98	1	99	99	26	129	1	129	1	130	1	130	0	130	1	130
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	105	1	**105**	0	105	**105**	1	111	1	111	0	111	1	111	0	111	1	111
	Left-Through		0							0				0				0	
	Through	1152	2	576	1	1153	577	241	1452	2	**726**	1	1453	2	**727**	0	1453	2	**727**
	Through-Right		0							0				0				0	
	Right	37	1	37	0	37	37	175	214	1	214	0	214	1	214	0	214	1	214
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		348	North-South:		351	North-South:			605	North-South:			608	North-South:			608
		East-West:		643	East-West:		643	East-West:			875	East-West:			876	East-West:			876
		SUM:		991	SUM:		994	SUM:			1480	SUM:			1484	SUM:			1484
	VOLUME/CAPACITY (V/C) RATIO:			0.695			0.698				1.039				1.041				1.041
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.595**			**0.598**				**0.939**				**0.941**				**0.941**
	LEVEL OF SERVICE (LOS):			**A**			**A**				**E**				**E**				**E**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.002 **Δ*v/c* after mitigation:** 0.002

Significant impacted? NO **Fully mitigated?** N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mariposa Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
2	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2					2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	142	1	142	1	143	143	0	149	1	149	1	150	1	150	0	150	1	150
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	221	1	176	2	223	177	0	232	1	185	2	234	1	186	0	234	1	186
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1220	2	610	0	1220	610	300	1582	2	791	0	1582	2	791	0	1582	2	791
	Through-Right		0							0				0				0	
	Right	238	1	167	1	239	168	0	250	1	176	1	251	1	176	0	251	1	176
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	90	1	90	2	92	92	0	95	1	95	2	97	1	97	0	97	1	97
	Left-Through		0							0				0				0	
	Through	1154	2	577	0	1154	577	417	1630	2	815	0	1630	2	815	0	1630	2	815
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		176	North-South:		177	North-South:			185	North-South:			186	North-South:			186
		East-West:		700	East-West:		702	East-West:			886	East-West:			888	East-West:			888
		SUM:		876	SUM:		879	SUM:			1071	SUM:			1074	SUM:			1074
	VOLUME/CAPACITY (V/C) RATIO:			0.584			0.586				0.714				0.716				0.716
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.484			0.486				0.614				0.616				0.616
	LEVEL OF SERVICE (LOS):			A			A				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
3	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	109	1	**109**	0	109	**109**	37	152	1	**152**	0	152	1	**152**	0	152	1	**152**
Left-Through		0							0				0				0	
Through	1101	2	390	0	1101	390	137	1294	2	461	0	1294	2	461	0	1294	2	461
Through-Right		1							1				1				1	
Right	69	0	69	0	69	69	17	90	0	90	0	90	0	90	0	90	0	90
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	133	1	133	0	133	133	30	170	1	170	0	170	1	170	0	170	1	170
Left-Through		0							0				0				0	
Through	1089	2	**545**	2	1091	**546**	114	1259	2	**630**	2	1261	2	**631**	0	1261	2	**631**
Through-Right		0							0				0				0	
Right	116	1	1	0	116	0	67	189	1	0	0	189	1	0	0	189	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	115	1	**115**	2	117	**117**	127	248	1	**248**	2	250	1	**250**	0	250	1	**250**
Left-Through		0							0				0				0	
Through	944	2	472	2	946	473	226	1218	2	609	2	1220	2	610	0	1220	2	610
Through-Right		0							0				0				0	
Right	156	1	102	0	156	102	159	323	1	247	0	323	1	247	0	323	1	247
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	105	1	105	0	105	105	42	152	1	152	0	152	1	152	0	152	1	152
Left-Through		0							0				0				0	
Through	991	2	**496**	2	993	**497**	163	1205	2	**603**	2	1207	2	**604**	0	1207	2	**604**
Through-Right		0							0				0				0	
Right	66	1	0	0	66	0	72	141	1	56	0	141	1	56	0	141	1	56
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		654	*North-South:*		655	*North-South:*			782	*North-South:*			783	*North-South:*			783
	East-West:		611	*East-West:*		614	*East-West:*			851	*East-West:*			854	*East-West:*			854
	SUM:		1265	*SUM:*		1269	*SUM:*			1633	*SUM:*			1637	*SUM:*			1637
VOLUME/CAPACITY *(V/C)* RATIO:			0.920			0.923				1.188				1.191				1.191
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.820**			**0.823**				**1.088**				**1.091**				**1.091**
LEVEL OF SERVICE (LOS):			D			D				F				F				F

	NB--	SB--	EB--	WB--
Right Turns: FREE-1, NRTOR-2 or OLA-3?	0	3	0	0
	0	3	0	0
	0	3	0	0
	0	3	0	0

No. of Phases	4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0
ATSAC-1 or ATSAC+ATCS-2?	2
Override Capacity	0

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
4	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	70	0	70	0	70	70	7	81	0	81	0	81	0	81	0	81	0	81
Left-Through		0							0				0				0	
Through	588	0	**681**	0	588	**682**	107	725	0	**850**	0	725	0	**851**	0	725	0	**851**
Through-Right		0							0				0				0	
Right	23	0	0	1	24	0	20	44	0	0	1	45	0	0	0	45	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	50	0	**50**	5	55	**55**	15	68	0	**68**	5	73	0	**73**	0	73	0	**73**
Left-Through		0							0				0				0	
Through	494	0	583	0	494	588	131	650	0	762	0	650	0	767	0	650	0	767
Through-Right		0							0				0				0	
Right	39	0	0	0	39	0	3	44	0	0	0	44	0	0	0	44	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	28	0	**28**	0	28	**28**	27	56	0	**56**	0	56	0	**56**	0	56	0	**56**
Left-Through		1							1				1				1	
Through	767	0	472	2	769	473	84	890	0	656	2	892	0	657	0	892	0	657
Through-Right		1							1				1				1	
Right	64	0	472	0	64	473	19	86	0	656	0	86	0	657	0	86	0	657
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	42	0	42	0	42	42	45	89	0	89	0	89	0	89	0	89	0	89
Left-Through		1							1				1				1	
Through	786	0	**501**	2	788	**504**	140	966	0	**718**	2	968	0	**721**	0	968	0	**721**
Through-Right		1							1				1				1	
Right	48	0	501	4	52	504	63	113	0	718	4	117	0	721	0	117	0	721
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		731	North-South:		737	North-South:			918	North-South:			924	North-South:			924
	East-West:		529	East-West:		532	East-West:			774	East-West:			777	East-West:			777
	SUM:		1260	SUM:		1269	SUM:			1692	SUM:			1701	SUM:			1701
VOLUME/CAPACITY (V/C) RATIO:			0.840			0.846				1.128				1.134				1.134
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.740			0.746				1.028				1.034				1.034
LEVEL OF SERVICE (LOS):			C			C				F				F				F

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.006	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mariposa Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
5	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	12	0	**12**	5	17	17	0	13	0	**13**	5	18	0	18	0	18	0	18
	Left-Through		0							0				0				0	
	Through	79	0	116	3	82	**125**	0	83	0	122	3	86	0	**131**	0	86	0	**131**
	Through-Right		0							0				0				0	
	Right	25	0	0	1	26	0	0	26	0	0	1	27	0	0	0	27	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	88	0	88	1	89	**89**	0	92	0	92	1	93	0	**93**	0	93	0	**93**
	Left-Through		0							0				0				0	
	Through	47	0	**193**	2	49	196	0	49	0	**202**	2	51	0	205	0	51	0	205
	Through-Right		0							0				0				0	
	Right	58	0	0	0	58	0	0	61	0	0	0	61	0	0	0	61	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	32	0	**32**	0	32	**32**	0	34	0	**34**	0	34	0	**34**	0	34	0	**34**
	Left-Through		1							1				1				1	
	Through	795	0	470	1	796	474	95	931	0	576	1	932	0	580	0	932	0	580
	Through-Right		1							1				1				1	
	Right	16	0	470	7	23	474	0	17	0	576	7	24	0	580	0	24	0	580
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	39	0	39	2	41	41	0	41	0	41	2	43	0	43	0	43	0	43
	Left-Through		1							1				1				1	
	Through	824	0	**569**	1	825	**573**	142	1008	0	**669**	1	1009	0	**673**	0	1009	0	**673**
	Through-Right		1							1				1				1	
	Right	157	0	569	0	157	573	0	165	0	669	0	165	0	673	0	165	0	673
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		205	*North-South:*		214	*North-South:*			215	*North-South:*			224	*North-South:*			224
		East-West:		601	*East-West:*		605	*East-West:*			703	*East-West:*			707	*East-West:*			707
		SUM:		806	*SUM:*		819	*SUM:*			918	*SUM:*			931	*SUM:*			931
	VOLUME/CAPACITY *(V/C)* RATIO:			0.537			0.546				0.612				0.621				0.621
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.437**			**0.446**				**0.512**				**0.521**				**0.521**
	LEVEL OF SERVICE (LOS):			**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.009	Δ*v/c* after mitigation:	0.009
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Catalina Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
6	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	81	0	**81**	0	81	**81**	0	85	0	**85**	0	85	0	**85**	0	85	0	**85**
	Left-Through		0							0				0				0	
	Through	140	0	274	0	140	274	0	147	0	288	0	147	0	288	0	147	0	288
	Through-Right		0							0				0				0	
	Right	53	0	0	0	53	0	0	56	0	0	0	56	0	0	0	56	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	56	0	56	0	56	56	0	59	0	59	0	59	0	59	0	59	0	59
	Left-Through		0							0				0				0	
	Through	112	0	**309**	0	112	**309**	0	118	0	**325**	0	118	0	**325**	0	118	0	**325**
	Through-Right		0							0				0				0	
	Right	141	0	0	0	141	0	0	148	0	0	0	148	0	0	0	148	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	67	1	**67**	2	69	**69**	0	70	1	**70**	2	72	1	**72**	0	72	1	**72**
	Left-Through		0							0				0				0	
	Through	819	1	424	3	822	426	150	1011	1	521	3	1014	1	522	0	1014	1	522
	Through-Right		1							1				1				1	
	Right	29	0	29	0	29	29	0	30	0	30	0	30	0	30	0	30	0	30
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	45	1	45	0	45	45	0	47	1	47	0	47	1	47	0	47	1	47
	Left-Through		0							0				0				0	
	Through	950	1	**495**	6	956	**498**	155	1153	1	**598**	6	1159	1	**601**	0	1159	1	**601**
	Through-Right		1							1				1				1	
	Right	40	0	40	0	40	40	0	42	0	42	0	42	0	42	0	42	0	42
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		390	*North-South:*		390	*North-South:*			410	*North-South:*			410	*North-South:*			410
		East-West:		562	*East-West:*		567	*East-West:*			668	*East-West:*			673	*East-West:*			673
		SUM:		952	*SUM:*		957	*SUM:*			1078	*SUM:*			1083	*SUM:*			1083
VOLUME/CAPACITY (*V/C*) RATIO:				0.635			0.638				0.719				0.722				0.722
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.535**			**0.538**				**0.619**				**0.622**				**0.622**
LEVEL OF SERVICE (LOS):				A			A				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.003	Δ*v/c* after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
7	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	28	1	28	1	29	29	6	35	1	35	1	36	1	36	0	36	1	36
	Left-Through		0							0				0				0	
	Through	1222	1	651	0	1222	651	143	1427	1	755	0	1427	1	755	0	1427	1	755
	Through-Right		1							1				1				1	
	Right	79	0	79	0	79	79	0	83	0	83	0	83	0	83	0	83	0	83
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	60	1	60	0	60	60	65	128	1	128	0	128	1	128	0	128	1	128
	Left-Through		0							0				0				0	
	Through	1174	1	625	0	1174	626	211	1445	1	785	0	1445	1	786	0	1445	1	786
	Through-Right		1							1				1				1	
	Right	76	0	76	2	78	78	45	125	0	125	2	127	0	127	0	127	0	127
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	680	1	386	2	682	387	103	818	1	481	2	820	1	482	0	820	1	482
	Through-Right		1							1				1				1	
	Right	91	0	91	1	92	92	47	143	0	143	1	144	0	144	0	144	0	144
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	806	1	436	2	808	437	105	952	1	541	2	954	1	542	0	954	1	542
	Through-Right		1							1				1				1	
	Right	65	0	65	0	65	65	61	129	0	129	0	129	0	129	0	129	0	129
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		711	North-South:		711	North-South:			883	North-South:			883	North-South:			883
		East-West:		436	East-West:		437	East-West:			541	East-West:			542	East-West:			542
		SUM:		1147	SUM:		1148	SUM:			1424	SUM:			1425	SUM:			1425
VOLUME/CAPACITY (V/C) RATIO:				0.765			0.765				0.949				0.950				0.950
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.665			0.665				0.849				0.850				0.850
LEVEL OF SERVICE (LOS):				B			B				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
8	East-West Street:	James M Wood Boulevard	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	17	0	17	0	17	17	2	20	0	**20**	0	20	0	**20**	0	20	0	**20**
Left-Through		0							0				0				0	
Through	606	0	**628**	1	607	**629**	128	765	0	806	1	766	0	807	0	766	0	807
Through-Right		0							0				0				0	
Right	5	0	0	0	5	0	16	21	0	0	0	21	0	0	0	21	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	17	0	**17**	0	17	**17**	0	18	0	18	0	18	0	18	0	18	0	18
Left-Through		0							0				0				0	
Through	575	0	616	0	575	616	187	791	0	**834**	0	791	0	**834**	0	791	0	**834**
Through-Right		0							0				0				0	
Right	24	0	0	0	24	0	0	25	0	0	0	25	0	0	0	25	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	23	0	23	0	23	23	0	24	0	24	0	24	0	24	0	24	0	24
Left-Through		0							0				0				0	
Through	328	0	**428**	0	328	**428**	50	395	0	**502**	0	395	0	**502**	0	395	0	**502**
Through-Right		0							0				0				0	
Right	77	0	0	0	77	0	2	83	0	0	0	83	0	0	0	83	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	38	0	**38**	3	41	**41**	10	50	0	**50**	3	53	0	**53**	0	53	0	**53**
Left-Through		0							0				0				0	
Through	227	0	301	0	227	304	92	331	0	419	0	331	0	422	0	331	0	422
Through-Right		0							0				0				0	
Right	36	0	0	0	36	0	0	38	0	0	0	38	0	0	0	38	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		645	North-South:		646	North-South:			854	North-South:			854	North-South:			854
	East-West:		466	East-West:		469	East-West:			552	East-West:			555	East-West:			555
	SUM:		1111	SUM:		1115	SUM:			1406	SUM:			1409	SUM:			1409
VOLUME/CAPACITY (V/C) RATIO:			0.741			0.743				0.937				0.939				0.939
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.641			0.643				0.837				0.839				0.839
LEVEL OF SERVICE (LOS):			B			B				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
9	East-West Street:	James M Wood Boulevard	Projection Year:	2022	Peak Hour:	AM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	77	1	77	2	79	79	0	81	1	81	2	83	1	83	0	83	1	83
	Left-Through		0							0				0				0	
	Through	1279	1	663	1	1280	664	135	1479	1	788	1	1480	1	788	0	1480	1	788
	Through-Right		1							1				1				1	
	Right	47	0	47	0	47	47	47	96	0	96	0	96	0	96	0	96	0	96
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	78	1	78	0	78	78	13	95	1	95	0	95	1	95	0	95	1	95
	Left-Through		0							0				0				0	
	Through	1138	1	580	1	1139	580	245	1441	1	732	1	1442	1	733	0	1442	1	733
	Through-Right		1							1				1				1	
	Right	21	0	21	0	21	21	1	23	0	23	0	23	0	23	0	23	0	23
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	23	0	23	0	23	23	8	32	0	32	0	32	0	32	0	32	0	32
	Left-Through		0							0				0				0	
	Through	331	0	408	1	332	411	60	408	0	497	1	409	0	500	0	409	0	500
	Through-Right		0							0				0				0	
	Right	54	0	0	2	56	0	0	57	0	0	2	59	0	0	0	59	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
WESTBOUND	Left	29	0	29	0	29	29	94	124	0	124	0	124	0	124	0	124	0	124
	Left-Through		0							0				0				0	
	Through	219	0	296	1	220	297	102	332	0	511	1	333	0	512	0	333	0	512
	Through-Right		0							0				0				0	
	Right	48	0	0	0	48	0	5	55	0	0	0	55	0	0	0	55	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		741	North-South:		742	North-South:			883	North-South:			883	North-South:			883
		East-West:		437	East-West:		440	East-West:			621	East-West:			624	East-West:			624
		SUM:		1178	SUM:		1182	SUM:			1504	SUM:			1507	SUM:			1507
	VOLUME/CAPACITY (V/C) RATIO:			0.785			0.788				1.003				1.005				1.005
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.685			0.688				0.903				0.905				0.905
	LEVEL OF SERVICE (LOS):			B			B				E				E				E

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.002 — Δ*v/c* after mitigation: 0.002

Significant impacted? NO — Fully mitigated? N/A

Afternoon Peak Hour

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Normandie Avenue / Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
1	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			3			3			3				3					3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		0	NB-- 3 SB--		0	NB-- 3 SB--		0		NB-- 3 SB--		0		NB-- 3 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2					2
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	55	0	**55**	2	57	**57**	39	97	0	**97**	2	99	0	**99**	0	99	0	**99**
	Left-Through		1							1				1				1	
	Through	535	1	323	5	540	327	200	762	1	575	5	767	1	582	0	767	1	582
	Through-Right		0							0				0				0	
	Right	98	1	0	0	98	0	40	143	1	31	0	143	1	31	0	143	1	31
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	68	0	68	0	68	68	194	265	0	265	0	265	0	265	0	265	0	265
	Left-Through		1							1				1				1	
	Through	513	1	**393**	6	519	**396**	207	746	1	**746**	6	752	1	**752**	0	752	1	**752**
	Through-Right		0							0				0				0	
	Right	72	1	32	0	72	32	40	116	1	48	0	116	1	48	0	116	1	48
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	81	1	81	0	81	81	52	137	1	**137**	0	137	1	**137**	0	137	1	**137**
	Left-Through		0							0				0				0	
	Through	1138	2	**569**	2	1140	**570**	216	1412	2	706	2	1414	2	707	0	1414	2	707
	Through-Right		0							0				0				0	
	Right	77	1	77	2	79	79	24	105	1	105	2	107	1	107	0	107	1	107
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	104	1	**104**	0	104	**104**	3	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	1145	2	573	2	1147	574	397	1600	2	**800**	2	1602	2	**801**	0	1602	2	**801**
	Through-Right		0							0				0				0	
	Right	86	1	86	0	86	86	94	184	1	52	0	184	1	52	0	184	1	52
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		448	North-South:		453	North-South:			843	North-South:			851	North-South:			851
		East-West:		673	East-West:		674	East-West:			937	East-West:			938	East-West:			938
		SUM:		1121	SUM:		1127	SUM:			1780	SUM:			1789	SUM:			1789
	VOLUME/CAPACITY (V/C) RATIO:			0.787			0.791				1.249				1.255				1.255
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.687			0.691				1.149				1.155				1.155
	LEVEL OF SERVICE (LOS):			B			B				F				F				F

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.006 — Δ*v/c* after mitigation: 0.006

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mariposa Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
2	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	196	1	**196**	2	198	**198**	0	206	1	**206**	2	208	1	**208**	0	208	1	**208**
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	160	1	111	3	163	112	0	168	1	117	3	171	1	118	0	171	1	118
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	1150	2	**575**	0	1150	**575**	451	1660	2	**830**	0	1660	2	**830**	0	1660	2	**830**
	Through-Right		0							0				0				0	
	Right	222	1	124	2	224	125	0	233	1	130	2	235	1	131	0	235	1	131
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	98	1	**98**	4	102	**102**	0	103	1	**103**	4	107	1	**107**	0	107	1	**107**
	Left-Through		0							0				0				0	
	Through	1181	2	591	0	1181	591	494	1735	2	868	0	1735	2	868	0	1735	2	868
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		196	North-South:		198	North-South:			206	North-South:			208	North-South:			208
		East-West:		673	East-West:		677	East-West:			933	East-West:			937	East-West:			937
		SUM:		869	SUM:		875	SUM:			1139	SUM:			1145	SUM:			1145
	VOLUME/CAPACITY (V/C) RATIO:			0.579			0.583				0.759				0.763				0.763
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.479			0.483				0.659				0.663				0.663
	LEVEL OF SERVICE (LOS):			A			A				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
3	East-West Street:	Wilshire Boulevard	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	101	1	**101**	0	101	**101**	139	245	1	**245**	0	245	1	**245**	0	245	1	**245**
Left-Through		0							0				0				0	
Through	1017	2	365	0	1017	365	118	1187	2	437	0	1187	2	437	0	1187	2	437
Through-Right		1							1				1				1	
Right	78	0	78	0	78	78	42	124	0	124	0	124	0	124	0	124	0	124
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	111	1	111	0	111	111	60	177	1	177	0	177	1	177	0	177	1	177
Left-Through		0							0				0				0	
Through	1021	2	**511**	4	1025	**513**	216	1289	2	**645**	4	1293	2	**647**	0	1293	2	**647**
Through-Right		0							0				0				0	
Right	72	1	0	0	72	0	222	298	1	104	0	298	1	101	0	298	1	101
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	113	1	113	3	116	116	75	194	1	**194**	3	197	1	**197**	0	197	1	**197**
Left-Through		0							0				0				0	
Through	928	2	**464**	3	931	**466**	177	1152	2	576	3	1155	2	578	0	1155	2	578
Through-Right		0							0				0				0	
Right	132	1	82	0	132	82	79	218	1	96	0	218	1	96	0	218	1	96
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	160	1	**160**	0	160	**160**	22	190	1	190	0	190	1	190	0	190	1	190
Left-Through		0							0				0				0	
Through	925	2	463	4	929	465	286	1258	2	**629**	4	1262	2	**631**	0	1262	2	**631**
Through-Right		0							0				0				0	
Right	87	1	32	0	87	32	38	129	1	41	0	129	1	41	0	129	1	41
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		612	*North-South:*		614	*North-South:*			890	*North-South:*			892	*North-South:*			892
	East-West:		624	*East-West:*		626	*East-West:*			823	*East-West:*			828	*East-West:*			828
	SUM:		1236	*SUM:*		1240	*SUM:*			1713	*SUM:*			1720	*SUM:*			1720
VOLUME/CAPACITY *(V/C)* RATIO:			0.899			0.902				1.246				1.251				1.251
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.799**			**0.802**				**1.146**				**1.151**				**1.151**
LEVEL OF SERVICE (LOS):			C			D				F				F				F

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

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.005	Δ*v/c* after mitigation:	0.005
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
4	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	51	0	51	0	51	51	20	74	0	74	0	74	0	74	0	74	0	74
Left-Through		0							0				0				0	
Through	473	0	**557**	0	473	**559**	203	700	0	**857**	0	700	0	**859**	0	700	0	**859**
Through-Right		0							0				0				0	
Right	33	0	0	2	35	0	48	83	0	0	2	85	0	0	0	85	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	35	0	**35**	8	43	**43**	30	67	0	**67**	8	75	0	**75**	0	75	0	**75**
Left-Through		0							0				0				0	
Through	464	0	526	0	464	534	189	677	0	788	0	677	0	796	0	677	0	796
Through-Right		0							0				0				0	
Right	27	0	0	0	27	0	16	44	0	0	0	44	0	0	0	44	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	33	0	33	0	33	33	46	81	0	81	0	81	0	81	0	81	0	81
Left-Through		1							1				1				1	
Through	929	0	**558**	4	933	**560**	101	1077	0	**815**	4	1081	0	**817**	0	1081	0	**817**
Through-Right		1							1				1				1	
Right	55	0	558	0	55	560	8	66	0	815	0	66	0	817	0	66	0	817
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	49	0	**49**	0	49	**49**	22	73	0	**73**	0	73	0	**73**	0	73	0	**73**
Left-Through		1							1				1				1	
Through	787	0	515	3	790	520	115	942	0	729	3	945	0	734	0	945	0	734
Through-Right		1							1				1				1	
Right	47	0	515	6	53	520	29	78	0	729	6	84	0	734	0	84	0	734
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		592	North-South:		602	North-South:			924	North-South:			934	North-South:			934
	East-West:		607	East-West:		609	East-West:			888	East-West:			890	East-West:			890
	SUM:		1199	SUM:		1211	SUM:			1812	SUM:			1824	SUM:			1824
VOLUME/CAPACITY (V/C) RATIO:			0.799			0.807				1.208				1.216				1.216
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.699			0.707				1.108				1.116				1.116
LEVEL OF SERVICE (LOS):			B			C				F				F				F

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.008	Δ*v/c* after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mariposa Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
5	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	14	0	**14**	8	22	**22**	0	15	0	**15**	8	23	0	**23**	0	23	0	**23**
	Left-Through		0							0				0				0	
	Through	47	0	87	5	52	102	0	49	0	91	5	54	0	106	0	54	0	106
	Through-Right		0							0				0				0	
	Right	26	0	0	2	28	0	0	27	0	0	2	29	0	0	0	29	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	182	0	182	2	184	184	0	191	0	191	2	193	0	193	0	193	0	193
	Left-Through		0							0				0				0	
	Through	73	0	**320**	4	77	**326**	0	77	0	**336**	4	81	0	**342**	0	81	0	**342**
	Through-Right		0							0				0				0	
	Right	65	0	0	0	65	0	0	68	0	0	0	68	0	0	0	68	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	22	0	22	0	22	22	0	23	0	23	0	23	0	23	0	23	0	23
	Left-Through		1							1				1				1	
	Through	927	0	**517**	2	929	**525**	94	1068	0	**613**	2	1070	0	**621**	0	1070	0	**621**
	Through-Right		1							1				1				1	
	Right	19	0	517	13	32	525	0	20	0	613	13	33	0	621	0	33	0	621
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	16	0	**16**	4	20	**20**	0	17	0	**17**	4	21	0	**21**	0	21	0	**21**
	Left-Through		1							1				1				1	
	Through	844	0	503	2	846	512	104	991	0	598	2	993	0	611	0	993	0	611
	Through-Right		1							1				1				1	
	Right	98	0	503	0	98	512	0	103	0	598	0	103	0	611	0	103	0	611
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES		*North-South:*	334		*North-South:*	348		*North-South:*		351		*North-South:*		365		*North-South:*		365
			East-West:	533		*East-West:*	545		*East-West:*		630		*East-West:*		642		*East-West:*		642
			SUM:	867		*SUM:*	893		*SUM:*		981		*SUM:*		1007		*SUM:*		1007
	VOLUME/CAPACITY (*V/C*) RATIO:			0.578			0.595				0.654				0.671				0.671
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.478**			**0.495**				**0.554**				**0.571**				**0.571**
	LEVEL OF SERVICE (LOS):			**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.017	Δ*v/c* after mitigation:	0.017
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Catalina Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
6	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	36	0	**36**	0	36	**36**	0	38	0	**38**	0	38	0	**38**	0	38	0	**38**
Left-Through		0							0				0				0	
Through	231	0	301	0	231	301	0	243	0	317	0	243	0	317	0	243	0	317
Through-Right		0							0				0				0	
Right	34	0	0	0	34	0	0	36	0	0	0	36	0	0	0	36	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	61	0	61	0	61	61	0	64	0	64	0	64	0	64	0	64	0	64
Left-Through		0							0				0				0	
Through	287	0	**520**	0	287	**520**	0	302	0	**547**	0	302	0	**547**	0	302	0	**547**
Through-Right		0							0				0				0	
Right	172	0	0	0	172	0	0	181	0	0	0	181	0	0	0	181	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	97	1	97	3	100	100	0	102	1	102	3	105	1	105	0	105	1	105
Left-Through		0							0				0				0	
Through	970	1	**508**	5	975	**511**	125	1144	1	**596**	5	1149	1	**599**	0	1149	1	**599**
Through-Right		1							1				1				1	
Right	46	0	46	0	46	46	0	48	0	48	0	48	0	48	0	48	0	48
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	72	1	**72**	0	72	**72**	0	76	1	**76**	0	76	1	**76**	0	76	1	**76**
Left-Through		0							0				0				0	
Through	786	1	409	11	797	414	159	985	1	509	11	996	1	515	0	996	1	515
Through-Right		1							1				1				1	
Right	31	0	31	0	31	31	0	33	0	33	0	33	0	33	0	33	0	33
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		556	*North-South:*		556	*North-South:*			585	*North-South:*			585	*North-South:*			585
	East-West:		580	*East-West:*		583	*East-West:*			672	*East-West:*			675	*East-West:*			675
	SUM:		1136	*SUM:*		1139	*SUM:*			1257	*SUM:*			1260	*SUM:*			1260
VOLUME/CAPACITY (*V/C*) RATIO:			0.757			0.759				0.838				0.840				0.840
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.657**			**0.659**				**0.738**				**0.740**				**0.740**
LEVEL OF SERVICE (LOS):			**B**			**B**				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.002	Δ*v/c* after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
7	East-West Street:	8th Street	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	59	1	**59**	2	61	**61**	27	89	1	89	2	91	1	91	0	91	1	91
Left-Through		0							0				0				0	
Through	1111	1	588	0	1111	588	244	1412	1	**740**	0	1412	1	**740**	0	1412	1	**740**
Through-Right		1							1				1				1	
Right	64	0	64	0	64	64	0	67	0	67	0	67	0	67	0	67	0	67
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	62	1	62	0	62	62	76	141	1	**141**	0	141	1	**141**	0	141	1	**141**
Left-Through		0							0				0				0	
Through	1183	1	**634**	0	1183	**636**	190	1433	1	786	0	1433	1	788	0	1433	1	788
Through-Right		1							1				1				1	
Right	85	0	85	4	89	89	50	139	0	139	4	143	0	143	0	143	0	143
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left-Through		0							0				0				0	
Through	834	1	**478**	3	837	**480**	101	978	1	**565**	3	981	1	**567**	0	981	1	**567**
Through-Right		1							1				1				1	
Right	121	0	121	2	123	123	24	151	0	151	2	153	0	153	0	153	0	153
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	0	0	**0**	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**
Left-Through		0							0				0				0	
Through	708	1	406	4	712	408	82	826	1	497	4	830	1	499	0	830	1	499
Through-Right		1							1				1				1	
Right	103	0	103	0	103	103	59	167	0	167	0	167	0	167	0	167	0	167
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		693	*North-South:*		697	*North-South:*			881	*North-South:*			881	*North-South:*			881
	East-West:		478	*East-West:*		480	*East-West:*			565	*East-West:*			567	*East-West:*			567
	SUM:		1171	*SUM:*		1177	*SUM:*			1446	*SUM:*			1448	*SUM:*			1448
VOLUME/CAPACITY *(V/C)* RATIO:			0.781			0.785				0.964				0.965				0.965
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.681**			**0.685**				**0.864**				**0.865**				**0.865**
LEVEL OF SERVICE (LOS):			**B**			**B**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.001	Δ*v/c* after mitigation:	0.001
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Irolo Street	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
8	East-West Street:	James M Wood Boulevard	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	14	0	**14**	0	14	**14**	2	17	0	**17**	0	17	0	**17**	0	17	0	**17**
Left-Through		0							0				0				0	
Through	575	0	605	2	577	607	253	857	0	914	2	859	0	916	0	859	0	916
Through-Right		0							0				0				0	
Right	16	0	0	0	16	0	23	40	0	0	0	40	0	0	0	40	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	18	0	18	0	18	18	0	19	0	19	0	19	0	19	0	19	0	19
Left-Through		0							0				0				0	
Through	648	0	**682**	0	648	**682**	201	882	0	**918**	0	882	0	**918**	0	882	0	**918**
Through-Right		0							0				0				0	
Right	16	0	0	0	16	0	0	17	0	0	0	17	0	0	0	17	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	20	0	20	0	20	20	0	21	0	21	0	21	0	21	0	21	0	21
Left-Through		0							0				0				0	
Through	335	0	**433**	0	335	**433**	99	451	0	**556**	0	451	0	**556**	0	451	0	**556**
Through-Right		0							0				0				0	
Right	78	0	0	0	78	0	2	84	0	0	0	84	0	0	0	84	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	14	0	**14**	5	19	**19**	23	38	0	**38**	5	43	0	**43**	0	43	0	**43**
Left-Through		0							0				0				0	
Through	212	0	256	0	212	261	53	276	0	346	0	276	0	351	0	276	0	351
Through-Right		0							0				0				0	
Right	30	0	0	0	30	0	0	32	0	0	0	32	0	0	0	32	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		696	*North-South:*		696	*North-South:*			935	*North-South:*			935	*North-South:*			935
	East-West:		447	*East-West:*		452	*East-West:*			594	*East-West:*			599	*East-West:*			599
	SUM:		1143	*SUM:*		1148	*SUM:*			1529	*SUM:*			1534	*SUM:*			1534
VOLUME/CAPACITY *(V/C)* RATIO:			0.762			0.765				1.019				1.023				1.023
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.662**			**0.665**				**0.919**				**0.923**				**0.923**
LEVEL OF SERVICE (LOS):			**B**			**B**				**E**				**E**				**E**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Vermont Avenue	Year of Count:	2017	Ambient Growth (%):	1	Conducted by:	GTC	Date:	10/18/2017
9	East-West Street:	James M Wood Boulevard	Projection Year:	2022	Peak Hour:	PM	Reviewed by:		Project:	3216 W 8th St Mixed-Use

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

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	57	1	57	4	61	61	0	60	1	60	4	64	1	64	0	64	1	64
Left-Through		0							0				0				0	
Through	1215	1	**642**	2	1217	**643**	252	1529	1	**849**	2	1531	1	**850**	0	1531	1	**850**
Through-Right		1							1				1				1	
Right	69	0	69	0	69	69	95	168	0	168	0	168	0	168	0	168	0	168
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	76	1	**76**	0	76	**76**	9	89	1	**89**	0	89	1	**89**	0	89	1	**89**
Left-Through		0							0				0				0	
Through	1169	1	612	2	1171	613	202	1431	1	745	2	1433	1	746	0	1433	1	746
Through-Right		1							1				1				1	
Right	54	0	54	0	54	54	2	59	0	59	0	59	0	59	0	59	0	59
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	26	0	26	0	26	26	8	35	0	35	0	35	0	35	0	35	0	35
Left-Through		0							0				0				0	
Through	301	0	**396**	2	303	**401**	115	431	0	**539**	2	433	0	**544**	0	433	0	**544**
Through-Right		0							0				0				0	
Right	69	0	0	3	72	0	0	73	0	0	3	76	0	0	0	76	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	36	0	**36**	0	36	**36**	55	93	0	**93**	0	93	0	**93**	0	93	0	**93**
Left-Through		0							0				0				0	
Through	218	0	301	2	220	303	76	305	0	458	2	307	0	460	0	307	0	460
Through-Right		0							0				0				0	
Right	47	0	0	0	47	0	11	60	0	0	0	60	0	0	0	60	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		718	*North-South:*		719	*North-South:*			938	*North-South:*			939	*North-South:*			939
	East-West:		432	*East-West:*		437	*East-West:*			632	*East-West:*			637	*East-West:*			637
	SUM:		1150	*SUM:*		1156	*SUM:*			1570	*SUM:*			1576	*SUM:*			1576
VOLUME/CAPACITY *(V/C)* RATIO:			0.767			0.771				1.047				1.051				1.051
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.667**			**0.671**				**0.947**				**0.951**				**0.951**
LEVEL OF SERVICE (LOS):			**B**			**B**				**E**				**E**				**E**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.004	Δ*v/c* after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Unsignalized Intersection
10. Mariposa Avenue & James M Wood Boulevard

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	21.4
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.099

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	0	33	6	26	24	27	33	405	7	11	277	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	33	6	26	24	27	33	405	7	11	277	31
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	2	7	6	7	8	101	2	3	69	8
Total Analysis Volume [veh/h]	0	33	6	26	24	27	33	405	7	11	277	31
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.11	0.01	0.10	0.08	0.04	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	20.36	18.41	12.07	21.43	19.44	12.51	7.95	0.00	0.00	8.17	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.40	0.40	0.40	0.80	0.80	0.80	1.63	1.63	1.63	1.14	1.14	1.14
95th-Percentile Queue Length [ft]	9.99	9.99	9.99	19.93	19.93	19.93	40.67	40.67	40.67	28.58	28.58	28.58
d_A, Approach Delay [s/veh]	17.43			17.68			0.59			0.28		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	2.72											
Intersection LOS	C											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	22.9
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.058

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	3	28	13	15	54	35	17	378	11	19	329	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	28	13	15	54	35	17	378	11	19	329	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	3	4	14	9	4	95	3	5	82	9
Total Analysis Volume [veh/h]	3	28	13	15	54	35	17	378	11	19	329	35
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.09	0.02	0.06	0.18	0.05	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	22.54	18.59	11.93	22.86	20.83	14.11	8.06	0.00	0.00	8.13	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.43	0.43	0.43	1.16	1.16	1.16	1.52	1.52	1.52	1.44	1.44	1.44
95th-Percentile Queue Length [ft]	10.78	10.78	10.78	29.09	29.09	29.09	38.03	38.03	38.03	36.00	36.00	36.00
d_A, Approach Delay [s/veh]	16.89			18.86			0.34			0.40		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.20											
Intersection LOS	C											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	21.9
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.112

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	0	33	6	29	24	30	35	405	7	11	277	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	33	6	29	24	30	35	405	7	11	277	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	2	7	6	8	9	101	2	3	69	9
Total Analysis Volume [veh/h]	0	33	6	29	24	30	35	405	7	11	277	35
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.11	0.01	0.11	0.08	0.04	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	20.65	18.60	12.11	21.90	19.86	12.83	7.97	0.00	0.00	8.17	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.41	0.41	0.41	0.88	0.88	0.88	1.65	1.65	1.65	1.16	1.16	1.16
95th-Percentile Queue Length [ft]	10.13	10.13	10.13	22.02	22.02	22.02	41.16	41.16	41.16	29.07	29.07	29.07
d_A, Approach Delay [s/veh]	17.60			18.03			0.62			0.28		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	2.86											
Intersection LOS	C											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	24.1
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.083

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	3	28	13	21	54	40	22	378	11	19	329	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	28	13	21	54	40	22	378	11	19	329	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	3	5	14	10	6	95	3	5	82	10
Total Analysis Volume [veh/h]	3	28	13	21	54	40	22	378	11	19	329	41
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.10	0.02	0.08	0.18	0.06	0.02	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	23.27	19.00	12.01	24.07	21.94	14.96	8.09	0.00	0.00	8.13	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.44	0.44	0.44	1.37	1.37	1.37	1.56	1.56	1.56	1.47	1.47	1.47
95th-Percentile Queue Length [ft]	11.08	11.08	11.08	34.31	34.31	34.31	39.02	39.02	39.02	36.82	36.82	36.82
d_A, Approach Delay [s/veh]	17.23			19.90			0.43			0.40		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.52											
Intersection LOS	C											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	31.4
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.152

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	0	36	6	27	27	28	35	493	7	12	393	33
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	36	6	27	27	28	35	493	7	12	393	33
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	2	7	7	7	9	123	2	3	98	8
Total Analysis Volume [veh/h]	0	36	6	27	27	28	35	493	7	12	393	33
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.16	0.01	0.15	0.12	0.04	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	28.38	24.09	14.29	31.37	26.97	16.78	8.28	0.00	0.00	8.42	0.00	0.00
Movement LOS	D	C	B	D	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.61	0.61	0.61	1.30	1.30	1.30	2.59	2.59	2.59	2.05	2.05	2.05
95th-Percentile Queue Length [ft]	15.14	15.14	15.14	32.40	32.40	32.40	64.82	64.82	64.82	51.13	51.13	51.13
d_A, Approach Delay [s/veh]	22.69			24.94			0.54			0.23		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	3.09											
Intersection LOS	D											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	36.3
Analysis Method:	HCM2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.096

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	3	31	14	16	58	37	18	520	12	20	422	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	31	14	16	58	37	18	520	12	20	422	37
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	4	4	15	9	5	130	3	5	106	9
Total Analysis Volume [veh/h]	3	31	14	16	58	37	18	520	12	20	422	37
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.15	0.03	0.10	0.27	0.06	0.02	0.01	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	34.43	25.35	14.95	36.30	31.39	20.59	8.32	0.00	0.00	8.54	0.00	0.00
Movement LOS	D	D	B	E	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.70	0.70	0.70	2.00	2.00	2.00	2.87	2.87	2.87	2.49	2.49	2.49
95th-Percentile Queue Length [ft]	17.43	17.43	17.43	49.90	49.90	49.90	71.75	71.75	71.75	62.32	62.32	62.32
d_A, Approach Delay [s/veh]	22.88			28.50			0.27			0.36		
Approach LOS	C			D			A			A		
d_I, Intersection Delay [s/veh]	3.86											
Intersection LOS	E											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	32.4
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.171

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	0	36	6	30	27	31	37	493	7	12	393	37
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	36	6	30	27	31	37	493	7	12	393	37
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	2	8	7	8	9	123	2	3	98	9
Total Analysis Volume [veh/h]	0	36	6	30	27	31	37	493	7	12	393	37
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.16	0.01	0.17	0.12	0.05	0.03	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	28.87	24.39	14.37	32.42	27.91	17.56	8.30	0.00	0.00	8.42	0.00	0.00
Movement LOS	D	C	B	D	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.61	0.61	0.61	1.44	1.44	1.44	2.63	2.63	2.63	2.08	2.08	2.08
95th-Percentile Queue Length [ft]	15.36	15.36	15.36	36.02	36.02	36.02	65.65	65.65	65.65	51.90	51.90	51.90
d_A, Approach Delay [s/veh]	22.96			25.80			0.57			0.23		
Approach LOS	C			D			A			A		
d_I, Intersection Delay [s/veh]	3.29											
Intersection LOS	D											

Intersection Level Of Service Report
#10: Mariposa Ave & James M Wood Blvd

Control Type:	Two-way stop	Delay (sec / veh):	39.0
Analysis Method:	HCM2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.129

Intersection Setup

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Mariposa Ave			Mariposa Ave			James M Wood Blvd			James M Wood Blvd		
Base Volume Input [veh/h]	3	31	14	21	58	42	22	520	12	20	422	43
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	31	14	21	58	42	22	520	12	20	422	43
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	4	5	15	11	6	130	3	5	106	11
Total Analysis Volume [veh/h]	3	31	14	21	58	42	22	520	12	20	422	43
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	no	no		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	no	no		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.15	0.03	0.13	0.27	0.07	0.02	0.01	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	35.67	25.95	15.13	38.97	33.87	22.74	8.35	0.00	0.00	8.54	0.00	0.00
Movement LOS	E	D	C	E	D	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.72	0.72	0.72	2.35	2.35	2.35	2.94	2.94	2.94	2.55	2.55	2.55
95th-Percentile Queue Length [ft]	17.91	17.91	17.91	58.66	58.66	58.66	73.43	73.43	73.43	63.72	63.72	63.72
d_A, Approach Delay [s/veh]	23.40			30.89			0.33			0.35		
Approach LOS	C			D			A			A		
d_I, Intersection Delay [s/veh]	4.32											
Intersection LOS	E											

Appendix E

Signal Warrant Worksheets

SR#

Traffic Signal Warrants Worksheet

DATE 10/18/17 PREPARER GTC REVIEWER _____

MAJOR ST: James M Wood Boulevard

MINOR ST: Mariposa Avenue

Critical Approach Speed ____ MPH or Speed Limit 35 MPH

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ In built up area of isolated community of < 10,000 population..... } RURAL (R) ☒ URBAN (U)

Eight-Hour Vehicular Volume — WARRANT 1

N/A ☒

SATISFIED YES ☐ NO ☐

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Condition A or Condition B or combination of 80% of both parts A and B must be satisfied.
b. A 6-hour Manual Count may be used in a determination that this warrant is not met. However, supplement manual counts should be taken during separate hours for a determination that this warrant is met.
c. In applying each condition, the major street and minor street volumes shall be for the same hours. On the minor street, the higher volume does not need to be the same approach during each of the hours.
d. The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count.
e. Figure 4C-103(CA) should be used for new intersections, significantly reconstructed intersections, where near-term land development will result in increased volumes, or where it is not reasonable to use current traffic volumes.
f. Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. This site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles. Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.
g. At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher volume of the major-street left-turn volumes plus the higher volume minor-street approach as the “minor street” volume and both approaches of the major street minus the higher of the major-street left-turn volume as “major street” volume. In these cases, engineering judgment should be used to determine if left-turn phasing is necessary to accommodate the high volume of left-turn traffic.

Peak Hour WARRANT 3

N/A	☐
SATISFIED YES	☐
NO	☒

⋆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ⋆

a. Part A or Part B must be satisfied.
b. In applying each condition, the major street and minor street volumes shall be for the same hours.
c. The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count.
d. Estimated Peak Hour Volumes may be used for new intersections, significantly reconstructed intersections, or where near-term land development will result in increased volumes.
e. Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. This site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles. Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.
f. At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher volume of the major-street left-turn volumes plus the higher volume minor-street approach as the “minor street” volume and both approaches of the major street minus the higher of the major-street left-turn volume as “major street” volume. In these cases, engineering judgment should be used to determine if left-turn phasing is necessary to accommodate the high volume of left-turn traffic.

PART A

SATISFIED	YES	NO
	☐	☒

All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

	YES	NO	N/A
1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	☐	☐	☒
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	☒	☐	☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	☒	☐	☐

PART B

SATISFIED	YES	NO
	☐	☒

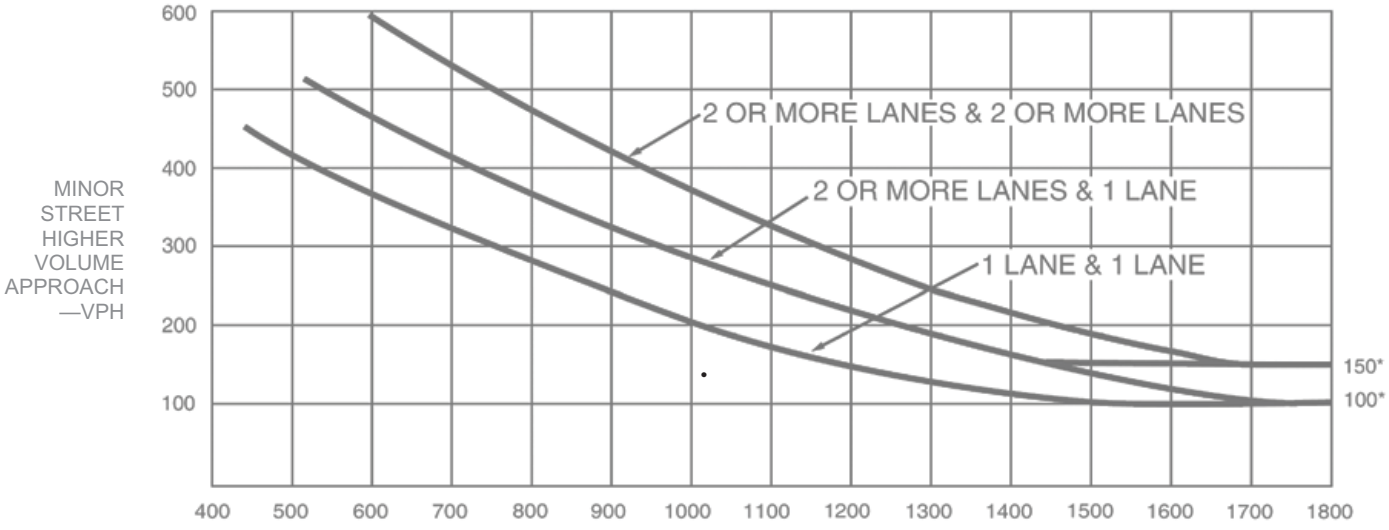
APPROACH LANES	One	2 or More	Hour 17:00
Both Approaches - Major Street	✓		1,039
Higher Approach - Minor Street	✓		121

	YES	NO
The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	☐	☒
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)		

Peak Hour (continued)

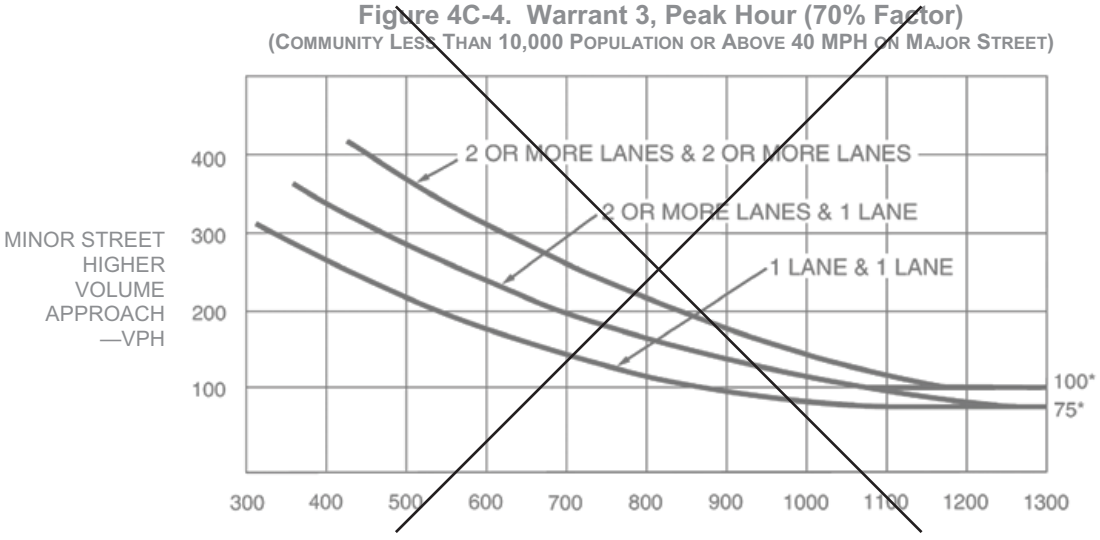
✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

URBAN
Figure 4C-3. Warrant 3, Peak Hour



** Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.*

RURAL
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



** Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.*