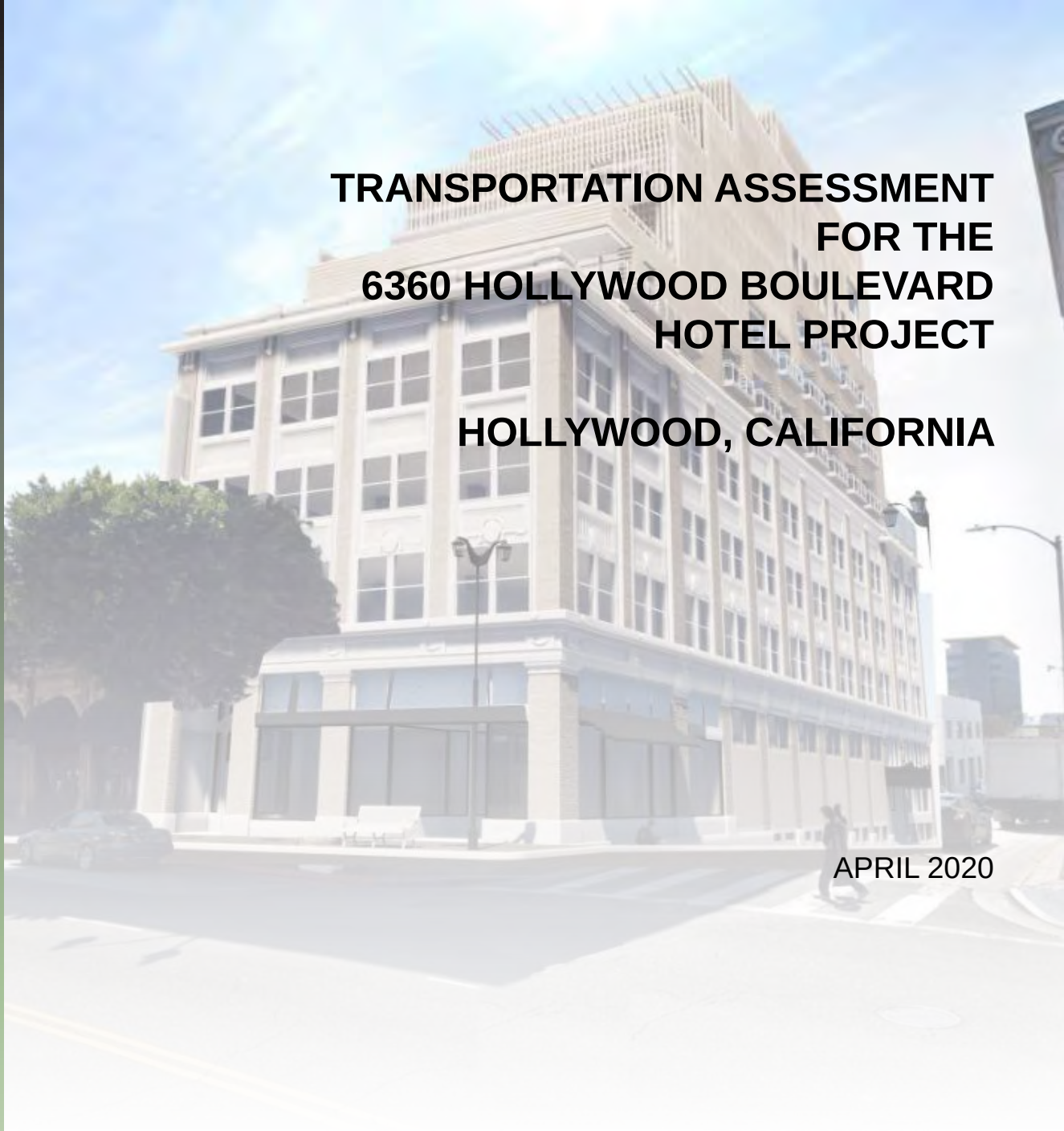

TRANSPORTATION ASSESSMENT FOR THE 6360 HOLLYWOOD BOULEVARD HOTEL PROJECT

HOLLYWOOD, CALIFORNIA

APRIL 2020

PREPARED FOR

ARTIST GUILD HOSPITALITY

PREPARED BY

Gibson transportation consulting, inc.

TRANSPORTATION ASSESSMENT
FOR THE
6360 HOLLYWOOD BOULEVARD
HOTEL PROJECT

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Prepared for:

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Prepared by:

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Chapter 1
Introduction

This study presents the transportation assessment for the 6360 Hollywood Boulevard Hotel development project (Project) proposed at 6360 Hollywood Boulevard (Project Site) in the Hollywood community of the City of Los Angeles (City). The methodology and base assumptions used in the analysis were established in conjunction with the Los Angeles Department of Transportation (LADOT).

PROJECT DESCRIPTION

The Project is proposing the adaptive reuse of an existing vacant four-story commercial building plus the addition of six new stories. The completed project would be 10 stories plus a penthouse level and is anticipated to consist of up to 90 hotel rooms with approximately 11,000 square feet (sf) of restaurant space. It should be noted that the site plan and land use program could be further refined through the entitlement process. However, the Project presented in this transportation assessment reflects the maximum building envelope to provide a conservative analysis of traffic impacts. Parking for the Project would be provided within an off-site parking facility. Operators would be on site to facilitate valet operations from a loading zone provided along Cosmo Street. Pedestrian access to the Project would be provided along Hollywood Boulevard and Cosmo Street.

The Project is anticipated to be completed in Year 2022. The conceptual Project Site plan is illustrated in Figure 1.

PROJECT LOCATION AND TRANSPORTATION ANALYSIS STUDY AREA

The Project Site is located within Council District 13, in the Central Hollywood neighborhood of Los Angeles, and consists of one lot identified as Assessor Parcel Number 5546008019. The

Project is bounded by Hollywood Boulevard to the north, commercial uses to the east, an alley and commercial uses to the south, and Cosmo Street to the west. The Project Site is currently occupied by a vacant four-story commercial building.

As shown in Figure 2, the transportation analysis Study Area includes a geographic area generally bounded by Hollywood Boulevard to the north, Ivar Avenue to the east, Selma Avenue to the south, and Cahuenga Boulevard to the west.

The Project is located approximately 0.3 miles south of US 101 and 700 feet west of the Los Angeles County Metropolitan Transportation Authority (Metro) B (Red) Line Hollywood/Vine Station. The Project is served by multiple bus lines along Hollywood Boulevard operated by Metro and LADOT Downtown Area Shuttle (DASH).

STUDY SCOPE

The scope of analysis for this study was developed in consultation with LADOT and is consistent with *Transportation Assessment Guidelines* (LADOT, July 2019) (the TAG) and in compliance with the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Section 15000 and following). The base assumptions and technical methodologies (i.e., trip generation, study locations, analysis methodology, etc.) were identified as part of the study approach and were outlined in a Memorandum of Understanding (MOU) that was reviewed and approved by LADOT in November 2019. The MOU is provided in Appendix A.

ORGANIZATION OF REPORT

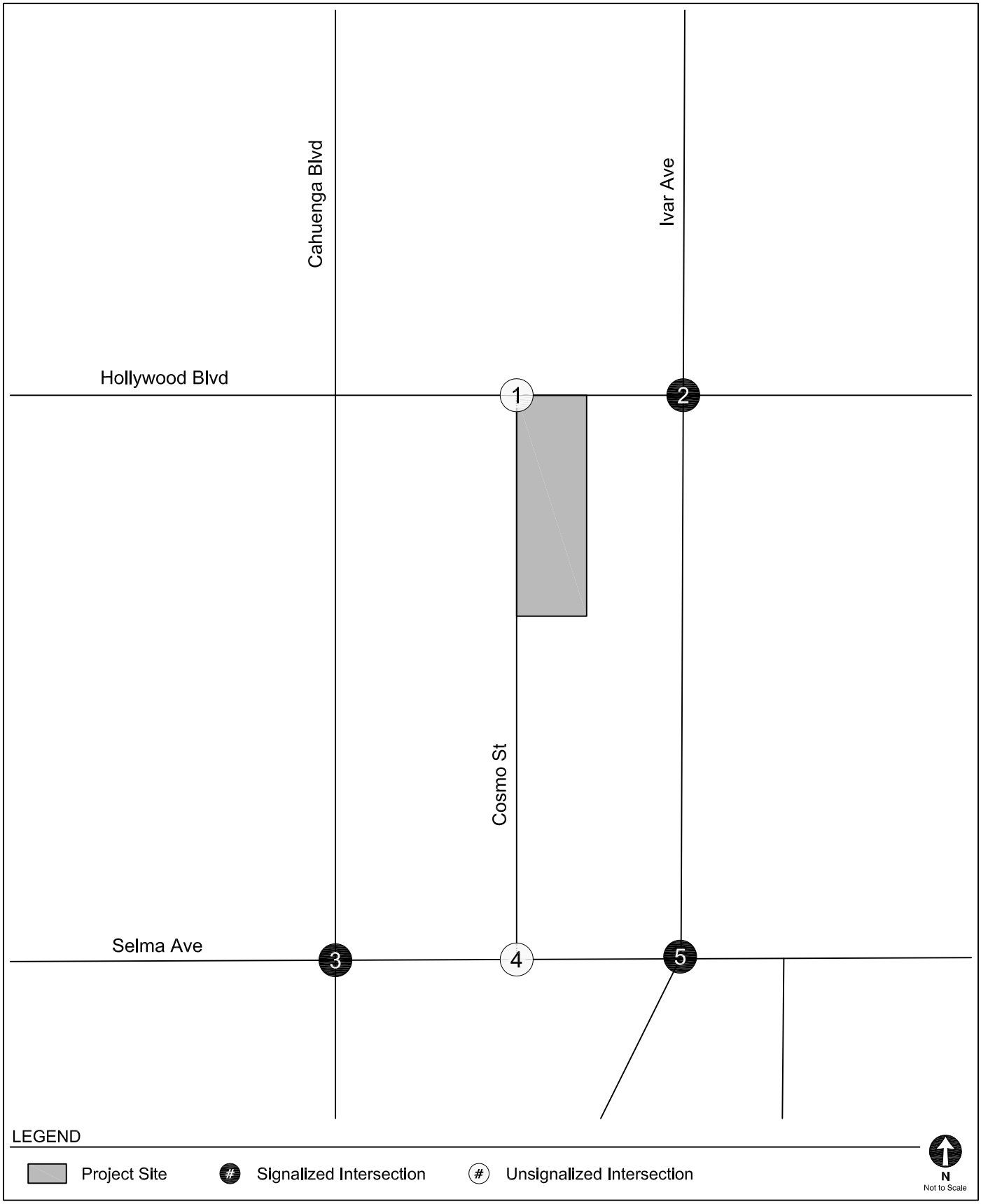
This report is divided into five chapters, including this Introduction. Chapter 2 describes the Project context including the existing and future circulation system, traffic volumes, and traffic conditions in the Study Area. Chapter 3 presents the CEQA analysis of transportation impacts. Chapter 4 details the non-CEQA transportation analyses. Chapter 5 summarizes the analyses and study conclusions. The appendices contain supporting documentation, including the MOU that outlines the study scope and assumptions, and additional details supporting the technical analyses.

Source: Hilda Rodríguez Architecture / Planning / Interiors. April, 2020.

N
Not to Scale

PROJECT SITE PLAN

FIGURE 1



STUDY AREA & ANALYZED INTERSECTIONS

FIGURE 2

Chapter 2
Project Context

A comprehensive data collection effort was undertaken to develop a detailed description of existing and future conditions in the Project Study Area.

The Existing Conditions analysis includes an assessment of the existing transportation infrastructure and conditions of the Study Area including freeway and street systems, transit service, as well as pedestrian and bicycle circulation. This analysis was conducted at the time the MOU was approved in November 2019. Fieldwork (lane configurations, signal phasing, parking restrictions, etc.) for the analyzed intersections was collected in Year 2019. Lane configurations for the analyzed intersections are provided in Figure 3, traffic count worksheets in Appendix B, and level of service (LOS) and delay worksheets in Appendix C.

In addition, this Chapter contains a discussion of the future conditions detailing the assumptions used to develop the Future without Project conditions in Year 2022, which corresponds to projected occupancy of the Project.

STUDY AREA

As noted, the Study Area includes a geographic area generally bounded by Hollywood Boulevard to the north, Ivar Avenue to the east, Selma Avenue to the south, and Cahuenga Boulevard to the west. This Study Area was established in consultation with LADOT based on the following factors identified in the TAG:

1. Primary driveway(s)
2. Intersections at either end of the block on which the Project is located or up to 600 feet from the primary Project driveway(s)
3. Unsignalized intersections adjacent to the Project Site that are integral to the Project's site access and circulation plan

4. Signalized intersections in proximity to the Project Site where 100 or more Project trips would be added

As listed in Table 1, a total of five intersections, three signalized and two unsignalized, were identified for detailed analysis during the MOU process. Figure 2 illustrates the location of the Project Site in relation to the surrounding street system and the five study intersections. The existing lane configurations at the analyzed intersections are provided in Figure 3.

EXISTING TRANSPORTATION CONDITIONS

Existing Street System

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

Street classifications are designated in *Mobility Plan 2035, An Element of the General Plan* (Los Angeles Department of City Planning [LADCP], September 2016) (the Mobility Plan). The Mobility Plan has revised street standards in an effort to provide a more enhanced balance between traffic flow and other important street functions including transit routes and stops, pedestrian environments, bicycle routes, building design and site access, etc. Street classifications are defined by the following in the Mobility Plan:

- Freeways are high-volume, high-speed roadways with limited access provided by interchanges that carry regional traffic through and do not provide local access to adjacent land uses.
- Arterial Streets are major streets that serve through traffic, as well as provide access to major commercial activity centers. Arterials are divided into two categories:
    - Boulevards represent the widest streets that typically provide regional access to major destinations and include two categories:
        - Boulevard I provides up to four travel lanes in each direction with a target operating speed of 40 mph

        - Boulevard II provides up to three travel lanes in each direction with a target operating speed of 35 mph

    - Avenues pass through both residential and commercial areas and include three categories:

        - Avenue I provides up to two travel lanes in each direction with a target operating speed of 35 mph

        - Avenue II provides up to two travel lanes in each direction with a target operating speed of 30 mph

        - Avenue III provides up to two travel lanes in each direction with a target operating speed of 25 mph

- Collector Streets are generally located in residential neighborhoods and provide access to and from arterial streets for local traffic and are not intended for cut-through traffic. They provide one travel lane in each direction with operating speed of 25 mph.

- Local Streets are intended to accommodate lower volumes of vehicle traffic and provide parking on both sides of the street. They provide one travel lane in each direction with a target operating speed of 15 to 20 mph. Local streets include two categories:

    - Continuous local streets connect to other streets at both ends

    - Non-continuous local streets lead to a dead-end

Primary regional access to the Project Site is provided by US-101. In proximity to the Project Site, the Study Area is served by Avenues such as Cahuenga Boulevard and Hollywood Boulevard. The following is a brief description of the roadways in the Study Area, including their classifications under the Mobility Plan:

Freeways

- US 101 – US 101 generally runs in the northwest-southeast direction and is located 0.30 miles north of the Project Site. In the vicinity of the Project Site, US 101 provides eight travel lanes, four in each direction. Access to and from US 101 is available via interchanges at Cahuenga Boulevard, Vine Street, Argyle Avenue, and Gower Street.

Roadways

- Cahuenga Boulevard – Cahuenga Boulevard is a designated Modified Avenue II through the Study Area. It runs in the north-south direction and is located approximately 200 feet

west of the Project Site. It provides four travel lanes, two in each direction. Metered street parking is generally provided on both sides of the street with two-hour limits from 8:00 AM to 8:00 PM Monday through Thursday, 8:00 AM to 12:00 AM on Friday and Saturday, and 11:00 AM to 8:00 PM on Sunday. Travel lanes are typically 10 feet wide and the total paved width is generally 56 feet.

- Cosmo Street – Cosmo Street is a designated Local Street through the Study Area. It runs in the north-south direction and is located adjacent to the western boundary of the Project Site. It provides two travel lanes, one in each direction. A commercial loading zone is provided on the west side of the street across from the Project Site and metered street parking is generally provided on the west side of the street with two-hour limits from 8:00 AM to 8:00 PM Monday through Thursday, 8:00 AM to 12:00 AM on Friday and Saturday, and 11:00 AM to 8:00 PM on Sunday. The total paved width of the street is generally 27 feet.

- Ivar Avenue – Ivar Avenue is a designated Local street through the Study Area. It runs in the north-south direction and is located approximately 150 feet west of the Project Site. It provides two lanes, one in each direction. Metered street parking is generally provided on both sides of the street with two-hour limits from 8:00 AM to 8:00 PM Monday through Thursday, 8:00 AM to Midnight on Friday and Saturday, and 3:00 PM to 8:00 PM on Sunday. The total paved width of the street is generally 46 feet.

- Hollywood Boulevard – Hollywood Boulevard is a designated Avenue I through the Study Area. It runs in the east-west direction and is located adjacent to the northern boundary of the Project Site. It provides four lanes, two in each direction. Metered street parking is generally provided on both sides of the street with two-hour limits from 8:00 AM to 8:00 PM Monday through Thursday, 8:00 AM to Midnight on Friday and Saturday, and 11:00 AM to 8:00 PM on Sunday. Travel lanes are typically 10 feet wide and the total paved width is generally 68 feet.

- Selma Avenue – Selma Avenue is a designated Local Street through the Study Area. It runs in the east-west direction and is located approximately 450 feet south of the Project Site. It provides two lanes, one in each direction. Metered street parking is generally provided on both sides of the street with two-hour limits from 8:00 AM to 8:00 PM Monday through Thursday, 8:00 AM to 12:00 AM on Friday and Saturday, and 11:00 AM to 8:00 PM on Sunday. The total paved width of the street is generally 40 feet.

The existing lane configurations at the study intersections are provided in Figure 3. The existing intersection mobility facilities are shown in Figure 4 and the transportation facilities are shown in Figure 5.

Existing Transit System

The Study Area is served by bus lines operated by Metro and DASH. Figure 6 illustrates the existing transit service in the Study Area.

In addition to the bus lines that provide service within the Project Site vicinity, the Metro B (Red) Line operates within the Study Area, providing service between North Hollywood and downtown Los Angeles and connecting with the Metro G (Orange) Line in North Hollywood, the Metro D (Purple) Line at Wilshire Boulevard, the Metro A (Blue) Line and Metro E (Expo) Line in downtown Los Angeles, and the Metro J (Gold) Line at Union Station. The Metro B (Red) Line provides a stop at the Hollywood / Vine Station, approximately 700 feet east of the Project Site.

Figure 6 illustrates the existing transit service in the Study Area. Table 2 summarizes the various transit lines operating in the Study Area for each of the service providers in the region, the type of service (peak vs. off-peak, express vs. local), and frequency of service. The average headways during the peak hour were estimated using detailed trip and ridership data from April 2019 provided by Metro, as well as schedule information from each respective transit provider.

Tables 3A and 3B summarize the total capacity of the Metro and DASH transit system during the morning and afternoon peak hours based on the detailed Metro ridership data from April 2019, frequency of service of each line, and the maximum seated and standing capacity of each bus or train. As shown in Tables 3A and 3B, the transit lines within 0.25 miles walking distance of the Project Site currently provide additional capacity for 6,218 transit trips during the morning peak hour and 5,359 transit trips during the afternoon peak hour. No data was available for DASH services. Bus lines with stop locations located more than 0.25 miles from the Project Site were not included.

Existing Bicycle System

Based on the Mobility Plan and *2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element* (LADCP, 2010) (2010 Bicycle Plan), the existing bicycle system in the Study Area is limited. The components of the 2010 Bicycle Plan have been incorporated into the bicycle network of the Mobility Plan.

The Mobility Plan consists of a Low-Stress Bikeway System and a Bicycle Lane Network. The Low-Stress Bikeway System is comprised of the Bicycle Enhanced Network, the Neighborhood Enhanced Network, and Bike Paths. The Bicycle Enhanced Network includes protected bicycle lanes (Class IV), which provide bicycling infrastructure including cycle tracks, bicycle signals, and

demarcated areas to facilitate turns at intersections and neighborhood streets. These typically provide mini-roundabouts, cross-street stop signs, crossing islands at major intersection crossings, improved street lighting, bicycle boxes, and bicycle-only left-turn pockets. Once implemented, these facilities would offer a safer environment for both cyclists and motorists. Currently, bicycle routes with shared lane markings, or "sharrows", are provided on Selma Avenue within the Study Area.

Existing Pedestrian Facilities

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile; these attributes are quantified by Walk Score and assigned a score out of 100 points. With the various commercial businesses and cultural centers adjacent to the residential neighborhoods of the Study Area, the walkability of the Study Area is approximately 97 points[1].

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. At the signalized study intersections, pedestrian signals, continental crosswalk striping, and Americans with Disabilities Act (ADA) wheelchair ramps are provided, as shown in Figure 4. Adjacent to the Project Site, the unsignalized intersection of Cosmo Street & Hollywood Boulevard provides a striped crosswalk with ADA wheelchair ramps on the southern leg of the intersection across Cosmo Street.

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,

[1] Walk Score (www.walkscore.com) rates the Project Site (6360 Hollywood Boulevard) with a score of 97 of 100 possible points (scores assessed on December 12, 2019 for the Hollywood neighborhood). 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.

a network of streets based on the collision data from the last five years, where strategic investments would have the biggest impact in reducing death and severe injury. Within the Study Area, Hollywood Boulevard and Selma Avenue are identified in the High Injury Network.

Existing Traffic Volumes

Intersection turning movement counts for typical weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods were collected in October and November 2019 while schools were in session and weather conditions were typical. The existing intersection peak hour traffic volumes are illustrated in Figure 7.

FUTURE CUMULATIVE TRANSPORTATION CONDITIONS

The forecast of Future without Project conditions was prepared in accordance with procedures outlined in the CEQA Guidelines. Specifically, two options are provided for developing the cumulative traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> "(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency."

As described in detail below, this analysis includes traffic growth both from future projects (option "A" above, the "Related Projects") and from regional growth projections (option "B" above, or ambient growth). The ambient growth factor discussed below likely includes some traffic growth resulting from the Related Projects. Therefore, the traffic analysis provides a highly conservative estimate of Future without Project traffic volumes.

The Future without Project traffic projections reflect growth in traffic over existing conditions from ambient growth, which reflects increases in traffic due to regional growth and development outside the Study Area and traffic generated by ongoing or entitled projects in, or in the vicinity of, the Study Area.

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. Based on discussions with LADOT through the MOU process, an ambient growth factor of 1% per year compounded annually was applied to remain conservative by adjusting the existing traffic volumes to reflect the effects of the regional growth and development by Year 2022. The total adjustments applied over the three-year period was 3.03%. These growth factors account for increases in traffic due to potential projects not yet proposed or projects outside the Study Area.

Related Projects

In accordance with the CEQA Guidelines requirements, this Study also considered the effects of the Project in relation to other developments either proposed, approved, or under construction (collectively, the Related Projects). With this information, the potential impact of the Project was, therefore, evaluated within the context of the cumulative impact of past, present, and probable future developments capable of producing related or cumulative impacts.

The list of Related Projects is based on information provided by LADCP and LADOT in September 2019, as well as recent studies of projects in the area. The Related Projects are detailed in Table 4 and shown in Figure 8. Though the buildout years of many of these Related Projects are uncertain and may be well beyond the buildout year of the Project, and notwithstanding that some may never be approved or developed, they were all considered as part of this transportation assessment and conservatively assumed to be completed by the Project buildout year of 2022. The traffic growth due to the development of Related Projects considered in this analysis is highly conservative and, by itself, substantially overestimates the actual traffic volume growth in the area that would likely

occur prior to Project buildout years. With the addition of the 1% per year ambient growth factor previously discussed, the Future without Project cumulative condition is even more conservative.

Using these conservative assumptions, the potential traffic impacts of the Project were evaluated. The development of estimated traffic volumes added to the study intersections as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

Trip Generation. Trip generation estimates for the Related Projects were provided by LADOT or were calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017). The Related Projects trip generation estimates summarized in Table 4 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 (e.g., transit, bus, bicycling, walking, carpool, etc.) Further, they do not account for the internal capture trips within a multi-use development or for the interaction of trips between multiple Related Projects, in which one Related Project serves as the origin for a trip destined for another Related Project.

Trip Distribution. The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of 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.

Traffic Assignment. The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above. Figure 9 shows the peak hour traffic volumes associated with these Related Projects at the study intersections.

Future without Project Traffic Volumes

The Related Projects volumes were then added to the existing traffic volumes after addition of ambient growth through the projected Project completion 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) for Year 2022 and are shown in Figure 10 for the five study intersections.

Future Roadway Improvements

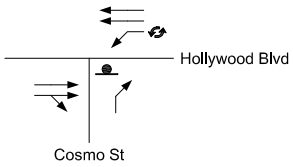
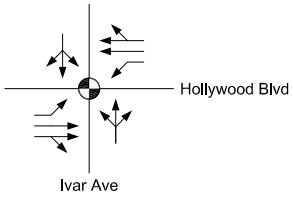
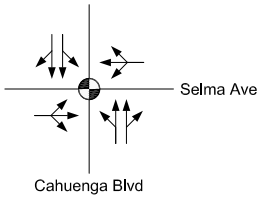
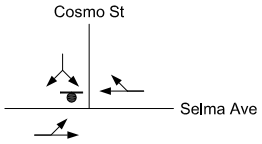
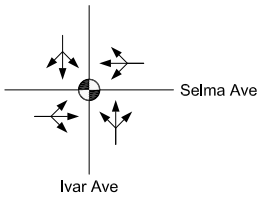
The analysis of Future Conditions accounted for roadway improvements that were funded and expected to be implemented prior to the buildout of the Project. These roadway improvements result in changes to the physical configuration at the study intersections. Other proposed roadways improvement projects that are not funded and traffic/trip reduction strategies such as Transportation Demand Management (TDM) programs for individual buildings and developments were conservatively omitted from the Future Conditions analyses.

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

- Transit Enhanced Network: Hollywood Boulevard is identified as a Transit-Enhanced street.
- Bicycle Network: Hollywood Boulevard and Cahuenga Boulevard are identified as part of the Bicycle Network.
- Pedestrian Enhanced Network: Cahuenga Boulevard and Hollywood Boulevard are identified as part of the Pedestrian Enhanced Network.

LEGEND

- Traffic Signal
- Stop Sign
- Two-Way Left-Turn Lane

	EXISTING CONDITIONS (YEAR 2019)	FUTURE CONDITIONS (YEAR 2022)
1. Cosmo Street & Hollywood Boulevard		Same as Existing Conditions
2. Ivar Avenue & Hollywood Boulevard		Same as Existing Conditions
3. Cahuenga Boulevard & Selma Avenue		Same as Existing Conditions
4. Cosmo Street & Selma Avenue		Same as Existing Conditions
5. Ivar Avenue & Selma Avenue		Same as Existing Conditions

INTERSECTION LANE CONFIGURATIONS

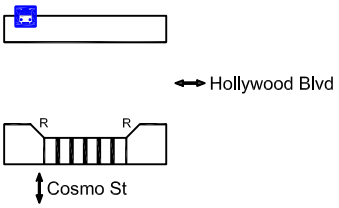
FIGURE 3

LEGEND

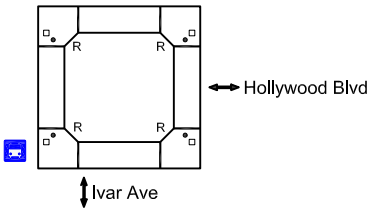
- Continental Crosswalk
- R Ramp
- Tactile Curb
- Ped Signal
- Ped Call Button
- Bus Stop
- Bicycle Facilities

N
Not to Scale

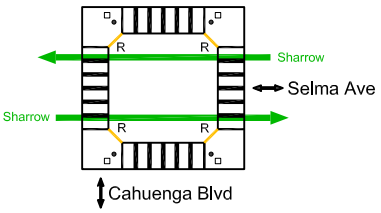
1. Cosmo Street & Hollywood Boulevard



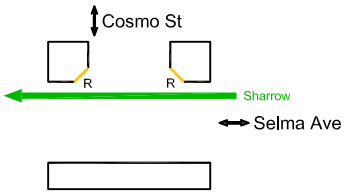
2. Ivar Avenue & Hollywood Boulevard



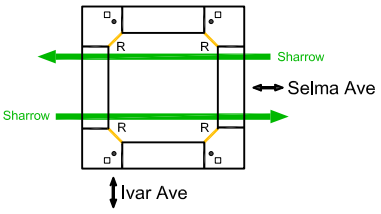
3. Cahuenga Boulevard & Selma Avenue



4. Cosmo Street & Selma Avenue

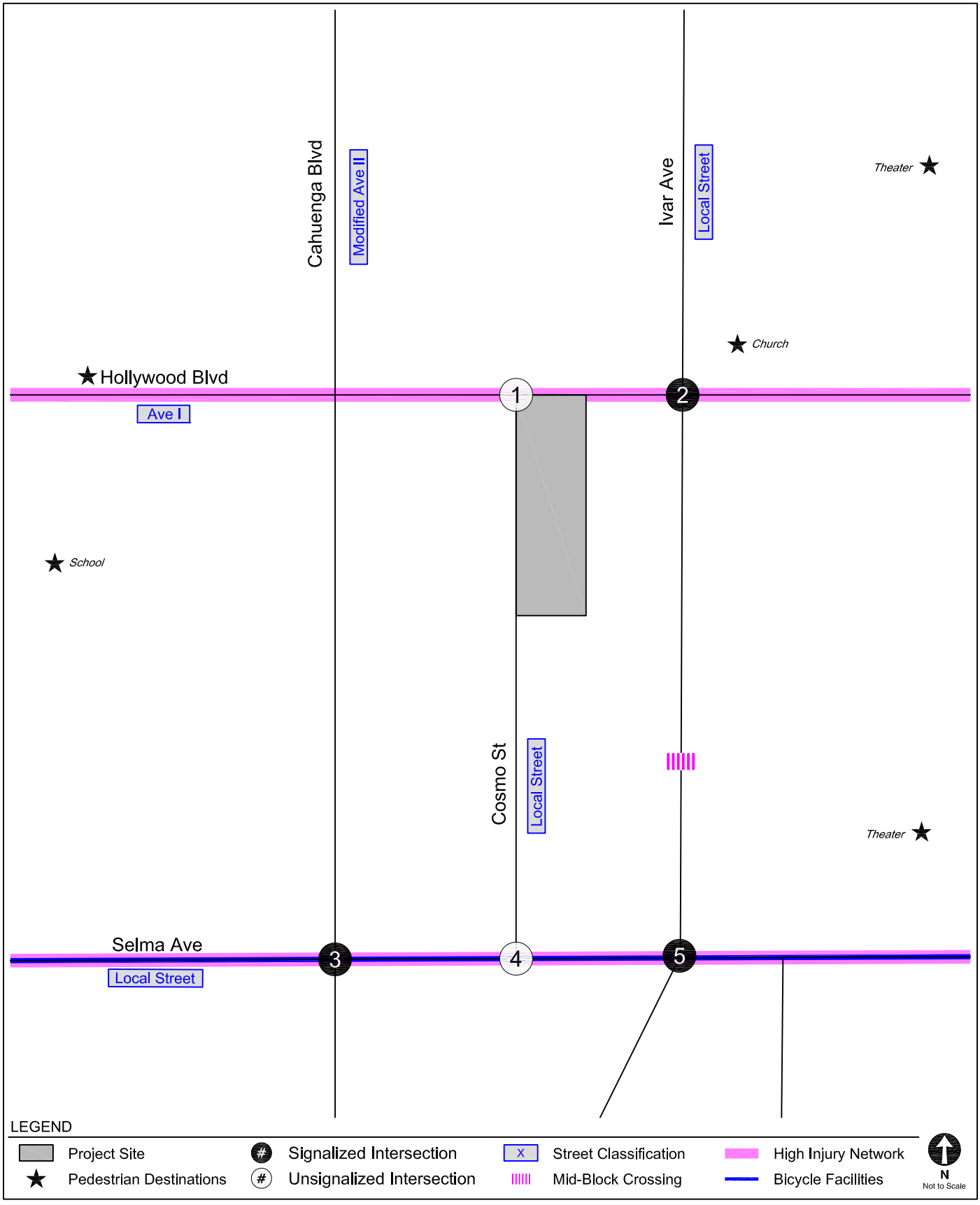


5. Ivar Avenue & Selma Avenue



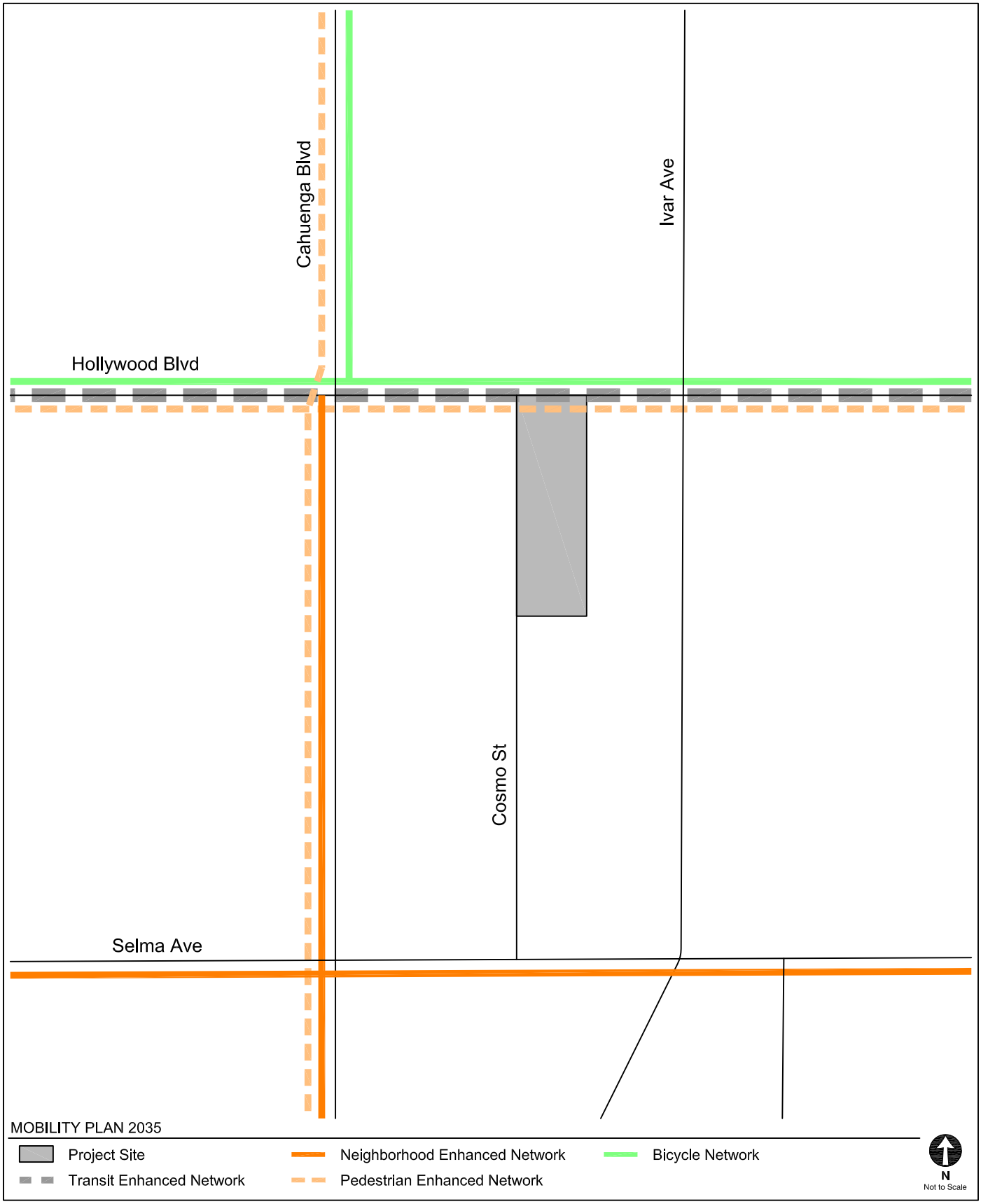
EXISTING INTERSECTION MOBILITY FACILITIES

FIGURE 4



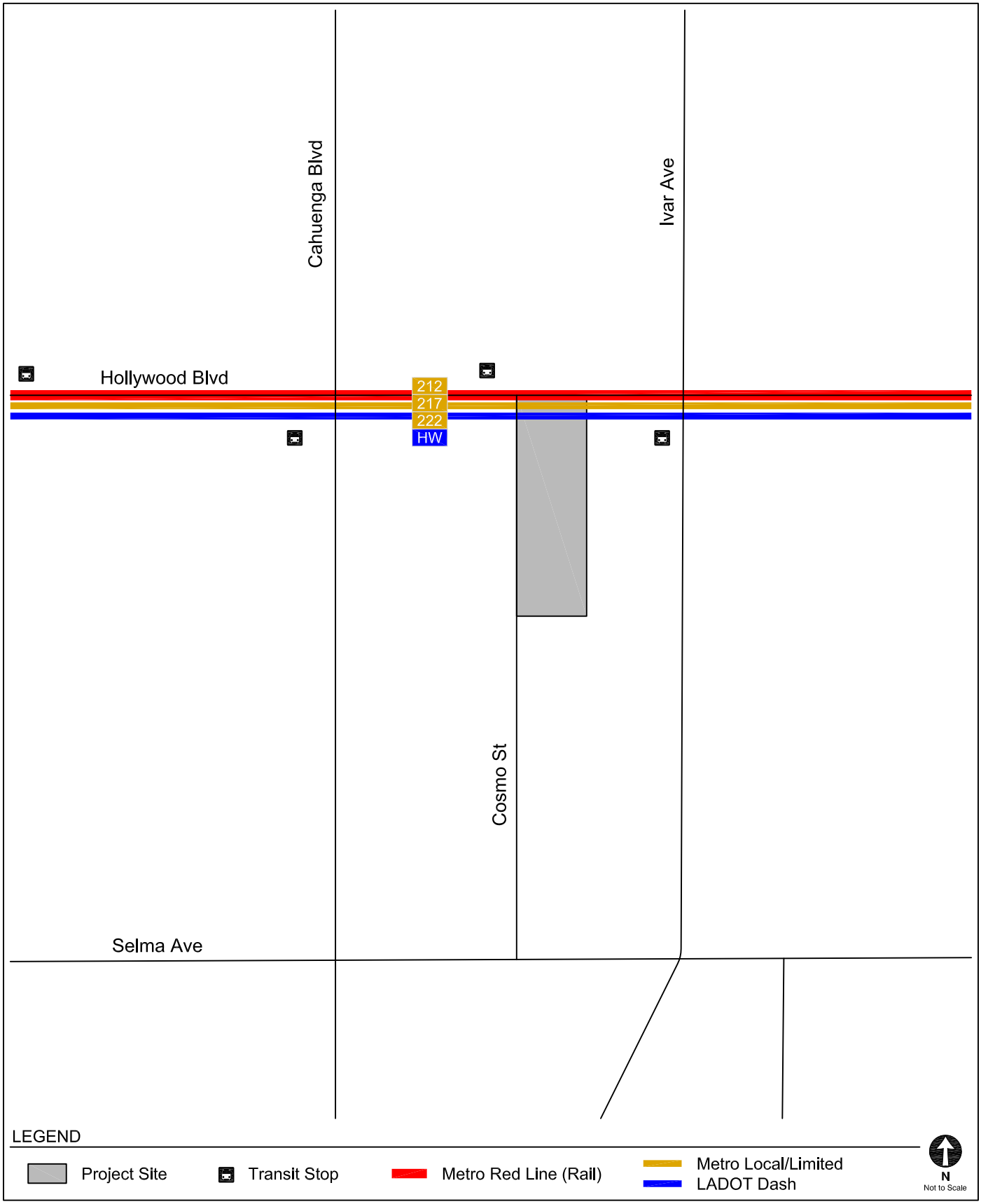
EXISTING TRANSPORTATION FACILITIES

FIGURE 5A



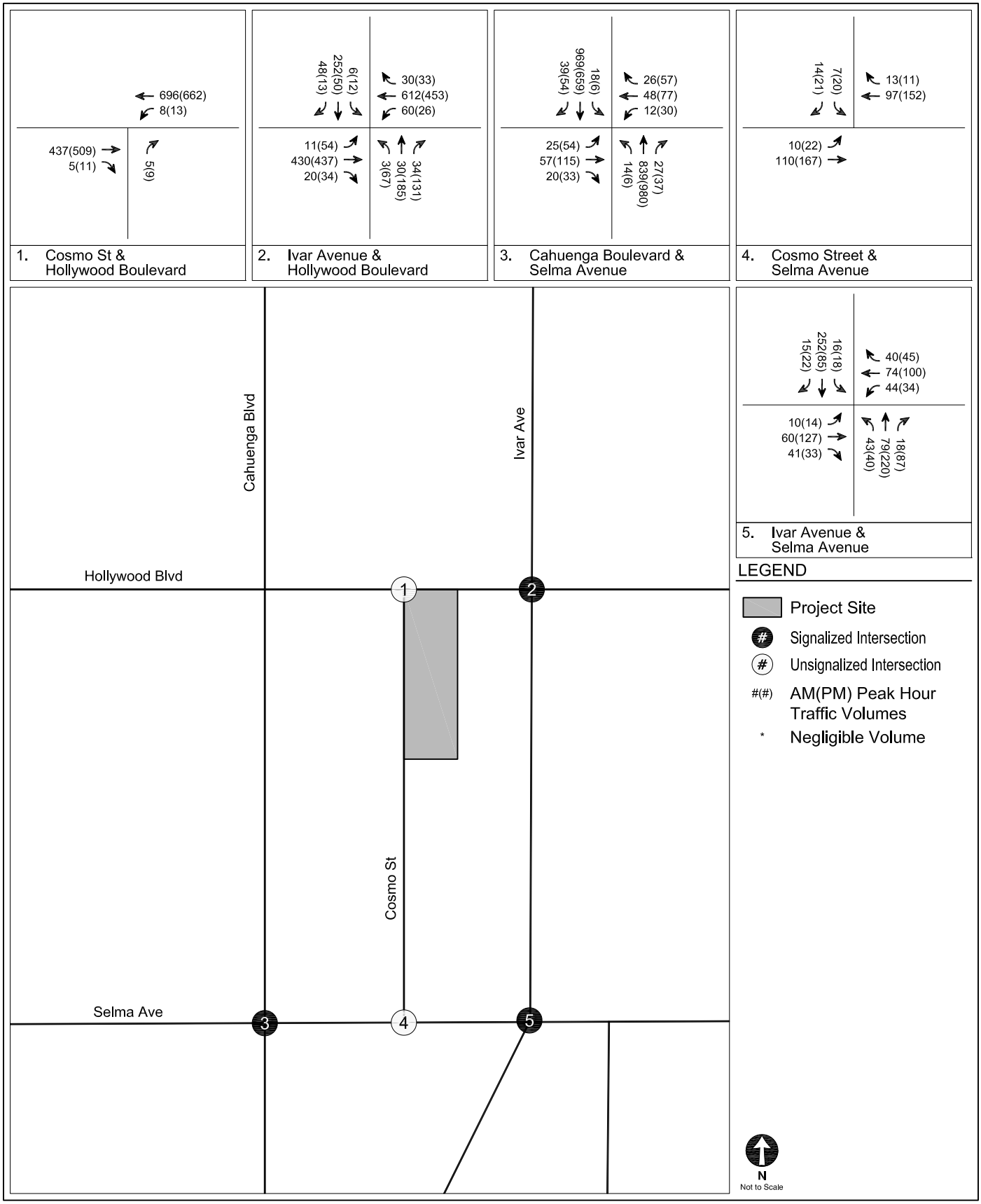
FUTURE TRANSPORTATION FACILITIES

FIGURE 5B



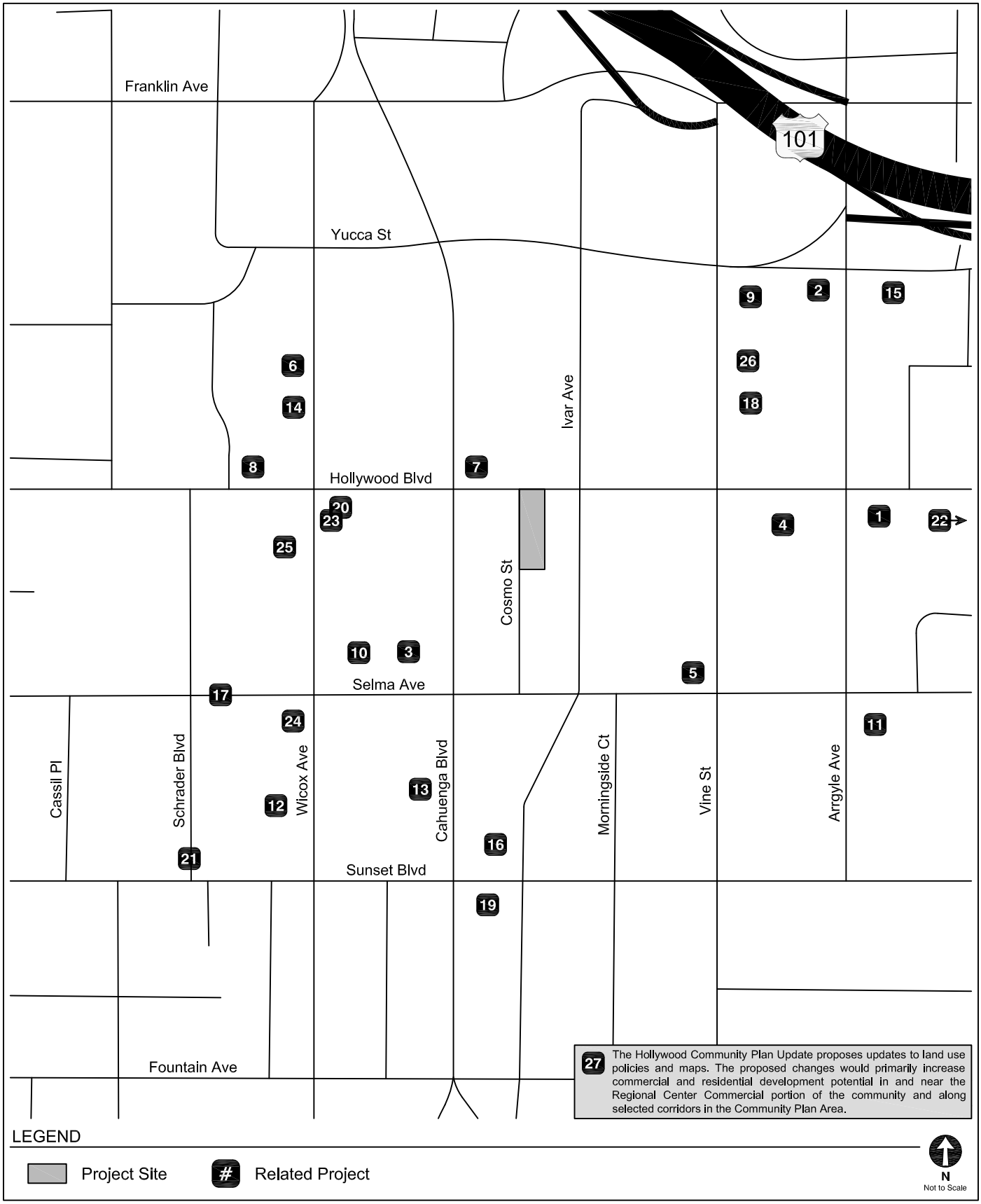
EXISTING TRANSIT SERVICE

FIGURE 6



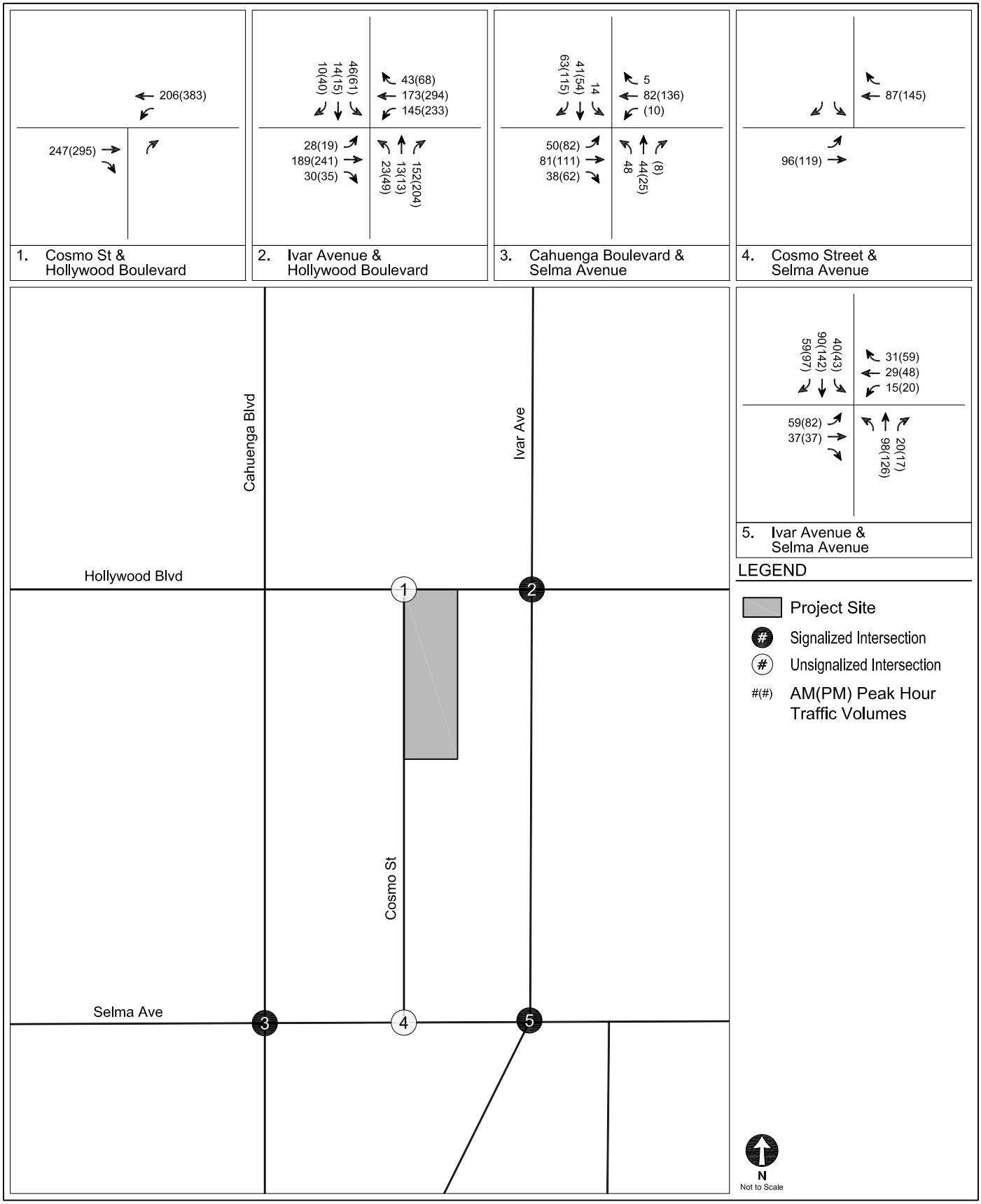
EXISTING CONDITIONS (YEAR 2019)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 7



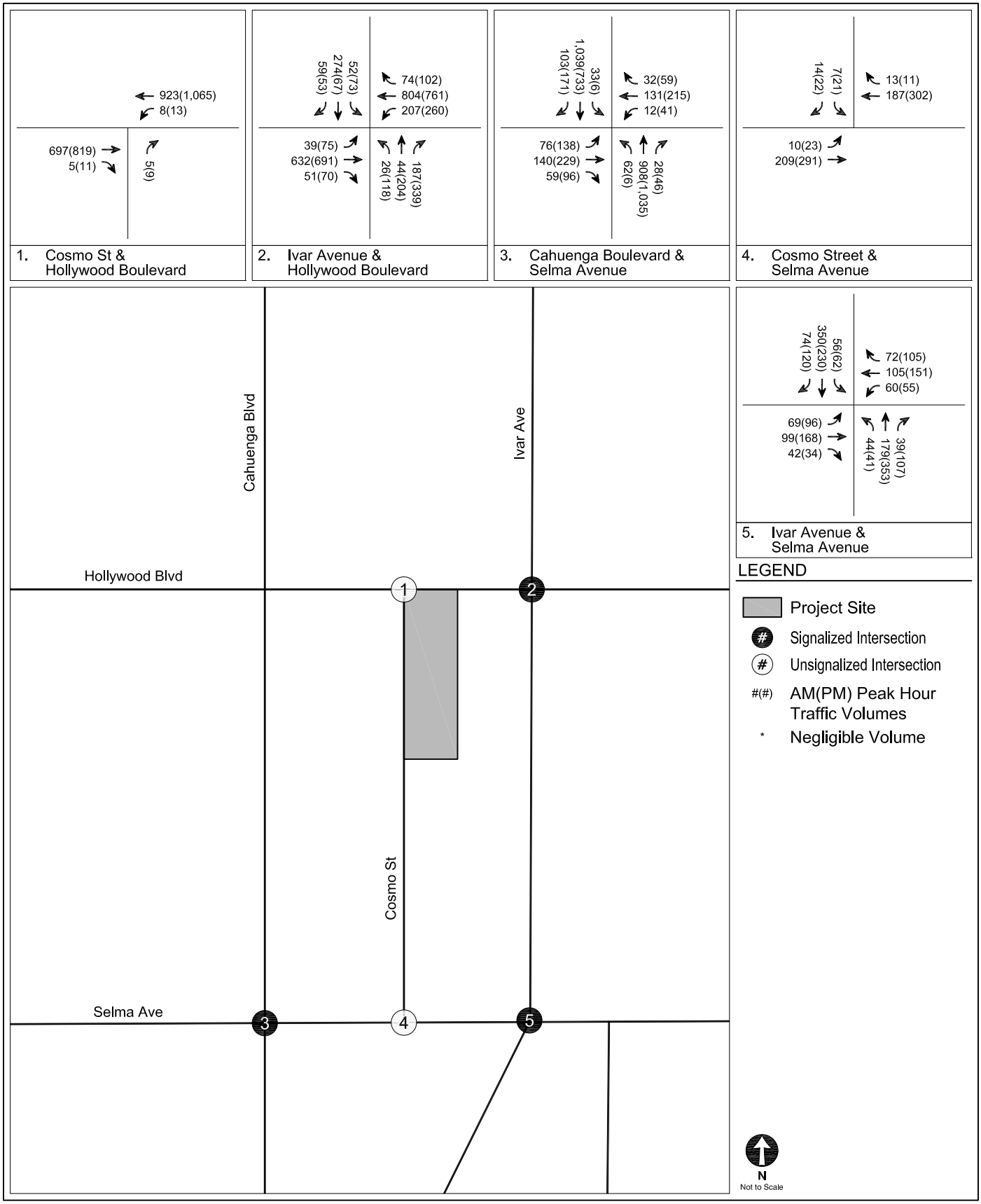
LOCATIONS OF RELATED PROJECTS

FIGURE 8



RELATED PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
9



FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2022)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 10

TABLE 1
STUDY INTERSECTIONS

No.	Intersection	Jurisdiction
1. [a]	Cosmo Street & Hollywood Boulevard	City of Los Angeles
2.	Ivar Avenue & Hollywood Bouelvard	City of Los Angeles
3.	Cahuenga Boulevard & Selma Avenue	City of Los Angeles
4. [a]	Cosmo Street & Selma Avenue	City of Los Angeles
5.	Ivar Avenue & Selma Avenue	City of Los Angeles

Note:
[a] Intersection is unsignalized.

TABLE 2
EXISTING TRANSIT WITHIN STUDY AREA

Provider, Route, and Service Area		Service Type	Hours of Operation in Study Area	Approximate Headway (minutes) [a]				Morning Peak Period Stops		Afternoon Peak Period Stops	
				Morning Peak Hour		Afternoon Peak Hour					
Metro Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
210	Redondo Beach to Hollywood via Vine Street and Crenshaw Boulevard	Local	5:00 A.M. - 2:00 A.M.	17	18	20	18	14	13	12	13
212	Hawthorne to Hollywood via La Brea Avenue and Hollywood Boulevard	Local	4:30 A.M. - 2:00 A.M.	13	16	24	18	19	15	10	13
217	Vermont & Sunset to Culver City Transit Center via Hollywood Boulevard, Fairfax Avenue and La Cienega Boulevard	Local	24 - Hour	17	15	13	14	14	16	18	17
222	Hollywood to Sunland via Hollywood Boulvard and Hollywood Way	Local	4:30 A.M. - 1:00 A.M.	60	60	48	48	4	4	5	5
LADOT DASH Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
HW	Hollywood	Local	7:00 A.M. - 7:00 P.M.	30	30	30	30	8	8	8	8
LAX FlyAway Shuttle - Hollywood				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
LAX	Hollywood to LAX	Shuttle	7:00 A.M. - 7:00 P.M.	60	60	60	60	4	4	4	4
Metro Rail Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Red	North Hollywood to Downtown Los Angeles	Rail	7:00 A.M. - 7:00 P.M.	10	10	10	10	24	24	24	24

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT DASH: Los Angeles Department of Transportation Downtown Area Shuttle

[a] Headway information based on operating and ridership data from Metro for April 2019.

TABLE 3A
TRANSIT SYSTEM CAPACITY SERVING PROJECT SITE - MORNING PEAK HOUR

Provider, Route, and Stop Location		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										
210	Hollywood Boulevard at Vine Street	50	3	11	1	7	49	43	170	139
212	Hollywood Boulevard at Cahuenga Boulevard	50	8	12	4	5	47	45	221	170
217	Hollywood Boulevard at Cahuenga Boulevard	50	6	7	4	5	46	45	162	182
222	Hollywood Boulevard at Cahuenga Boulevard	50	12	7	8	3	42	47	42	47
LADOT DASH Bus Service										
HW	Hollywood Boulevard at Cahuenga Boulevard	30	*no data provided*							
Metro Rail Service										
Red	Hollywood / Vine Station	750	*no data provided*		357	244	393	506	2,358	3,036
									Total Bus Service Capcity	1,133
									Total Rail Transit Capacity	5,394
									Total Transit Service Capacity	**6,218**

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT DASH: Los Angeles Department of Transportation Downtown Area Shuttle

[a] Capacity assumptions:

Metro Regular Bus - 40 seated / 50 standing.

Metro Articulated Bus - 66 seated / 75 standing.

Metro Red Line - 55 seats / car, 6 cars / run during peak periods. Metro assumes a maximum capacity of 230% of seated capacity, or approximately 125 / car.

LADOT DASH - 25 seated / 30 standing.

[b] Ridership information based on data from Metro for April 2019.

TABLE 3B
TRANSIT SYSTEM CAPACITY SERVING PROJECT SITE - AFTERNOON PEAK HOUR

Provider, Route, and Stop Location		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										
210	Hollywood Boulevard at Vine Street	50	3	13	2	10	48	40	145	131
212	Hollywood Boulevard at Cahuenga Boulevard	50	8	9	6	6	44	44	109	144
217	Hollywood Boulevard at Cahuenga Boulevard	50	9	8	6	5	44	45	197	190
222	Hollywood Boulevard at Cahuenga Boulevard	50	7	8	6	5	44	45	55	56
LADOT DASH Bus Service										
HW	Hollywood Boulevard at Cahuenga Boulevard	30	*no data provided*							
Metro Rail Service										
Red	Hollywood / Vine Station	750	*no data provided*		319	413	431	337	2,586	2,022
								Total Bus Service Capcity	1,027	
								Total Rail Transit Capacity	4,608	
								Total Transit Service Capacity	**5,359**	

Notes

Metro: Los Angeles County Metropolitan Transportation Authority

LADOT DASH: Los Angeles Department of Transportation Downtown Area Shuttle

[a] Capacity assumptions:

Metro Regular Bus - 40 seated / 50 standing.

Metro Articulated Bus - 66 seated / 75 standing.

Metro Red Line - 55 seats / car, 6 cars / run during peak periods. Metro assumes a maximum capacity of 230% of seated capacity, or approximately 125 / car.

LADOT DASH - 25 seated / 30 standing.

[b] Ridership information based on data from Metro for April 2019.

TABLE 4
RELATED PROJECTS

ID	Name	Address	Description	Trip Generation [a]						
				Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
					In	Out	Total	In	Out	Total
1 [b]	BLVD 6200 Mixed-Use	6200 W Hollywood Blvd	28 JLWQ Units, 1,014 apartment units and 175,000 sf retail (Phase 1 Complete)	2,816	41	103	143	133	109	242
2	Yucca Street Condos	6230 W Yucca St	114 apartment units and 2,697 sf commercial	473	5	27	32	26	12	38
3	Selma Hotel	6417 W Selma Ave	180 hotel rooms and 12,840 sf restaurant	1,849	6	4	10	61	59	120
4	Pantages Theater Office	6225 W Hollywood Blvd	210,000 sf office	1,918	243	33	276	43	411	254
5 [b]	Selma & Vine Office Project	1601 N Vine St	100,386 sf office and 2,012 sf commercial	1,239	155	27	182	39	145	184
6	1723 N Wilcox Residential	1723 N Wilcox Ave	68 apartment units and 3,700 sf retail	537	16	28	44	29	18	47
7	Hotel & Restaurant Project	6381 W Hollywood Blvd	80 hotel rooms and 15,290 sf restaurant	1,020	-19	11	-8	62	4	66
8	Hudson Building	6523 W Hollywood Blvd	10,402 sf restaurant, 4,074 sf of office and 890 sf of storage	547	-16	-11	-27	32	4	36
9	Millennium Hollywood Mixed-Use Project	1740 N Vine St	492 apartment units, 200 hotel rooms, 100,000 sf office, 35,000 sf fitness club, 15,000 sf retail and 34,000 sf restaurant	9,922	321	253	574	486	438	924
10	Selma - Wilcox Hotel	6421 W Selma Ave	114 hotel rooms and 1,993 sf restaurant	1,227	43	27	70	56	44	100
11	Modera Argyle	1546 N Argyle Ave	276 apartment units, 9,000 sf retail and 15,000 sf restaurant	2,013	43	127	170	128	51	179
12	Sunset + Wilcox	1541 N Wilcox Ave	200 hotel rooms and 9,000 sf restaurant	3,359	103	80	183	147	114	261
13	Cahuenga Boulevard Hotel	1525 N Cahuenga Blvd	64 hotel rooms, 700 sf rooftop restaurant/lounge and 3,300 sf restaurant	469	13	9	22	17	17	34
14	Wilcox Hotel	1717 N Wilcox Ave	133 hotel rooms and 3,580 sf retail	1,244	54	35	89	49	43	92
15	Mixed-Use	6220 W Yucca St	210 hotel rooms, 136 apartment units, 3,450 sf retail and 9,120 sf restaurant	2,652	88	111	199	130	85	215
16	Ivar Gardens Hotel	6409 W Sunset Blvd	275 hotel rooms and 1,900 sf retail	1,285	51	26	77	53	60	113
17	Selma Hotel	6516 W Selma Ave	212 rooms, 3,855 sf bar/lounge and 8,500 sf rooftop bar/event space	2,241	71	50	121	105	84	189
18	citizenM Hotel	1718 Vine St	216 hotel rooms and 4,354 sf restaurant	1,101	58	41	99	35	42	77
19	6400 Sunset Mixed-Use	6400 Sunset Blvd	200 apartment units and 7,000 sf restaurant	11	14	77	91	57	-6	51
20	Hollywood & Wilcox	6430-6440 W Hollywood Blvd	260 apartment units, 3,580 sf office, 11,020 sf retail and 3,200 sf restaurant	1,625	23	98	121	99	44	143
21	1600 Schrader	1600 Schrader Blvd	168-room hotel and 5,979 sf restaurant	1,666	58	40	98	80	63	143
22	Mixed-Use	6436 W Hollywood Ave	220 apartment units and 8,800 sf retail	1,486	22	78	100	85	52	137
23	Citizen News	1545 Wilcox Ave	16,100 sf flexible event space, 14,800 sf restaurant	2,341	36	50	86	128	47	175
24	1637 N Wilcox MU	1637 Wilcox Ave	93 apartments, 61 affordable; 6,586 sf commercial	831	20	44	64	40	27	67
25	Hollywood Center MU (Formerly Millennium)	1720 N Vine St	1005 Units (872 apartments, 133 affordable senior), 30,176 sf retail	6,346	171	290	461	368	264	632

OTHER AREA-WIDE PROJECTS

Project	Description	Extents
Hollywood Community Plan Update	The Hollywood Community Plan Update proposes updates to land use policies and the land use diagram. The proposed changes would primarily increase commercial and residential development potential in and near the Regional Center Commercial portion of the community and along selected corridors in the Community Plan Area. The decreases in development potential would be primarily focused on low to medium scale multi-family residential neighborhoods to conserve existing density and intensity of those neighborhoods. The projected population growth has been captured in the conservative ambient growth rate assumed in the Future analysis.	South of City of Burbank, City of Glendale, and SR 134; west of Interstate 5; north of Melrose Avenue; south of Mulholland Drive, City of West Hollywood, Beverly Hills, including land south of the City of West Hollywood and north of Rosewood Avenue between La Cienega Boulevard and La Brea Avenue.

Notes

[a] Source: Related project information based on available information provided by LADOT and Department of City Planning on September 17, 2019, and recent studies in the area.

[b] Although construction of the related project may be partially complete/entirely complete, the project was not fully occupied at the time traffic counts were conducted. Therefore, the related project was considered and listed to provide a more conservative analysis.

Chapter 3
CEQA Analysis of Transportation Impacts

This chapter presents the results of an analysis of CEQA-related transportation impacts. The analysis identifies any potential conflicts the Project may have with adopted City plans and policies and the improvements associated with the potential conflicts as well as the results of a Project vehicle miles traveled (VMT) analysis that satisfies State requirements under *State of California Senate Bill 743* (Steinberg, 2013) (SB 743).

METHODOLOGY

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

To adapt to SB 743, the Los Angeles City Planning Commission, on February 28, 2019, recommended the approval of revised guidelines to include new transportation analysis screening procedures and thresholds, subsequently approved by the Los Angeles City Council on July 30, 2019. The TAG defines the methodology of analyzing a project's transportation impacts in accordance with SB 743.

Per the TAG, the CEQA transportation analysis contains the following thresholds for identifying significant impacts:

- *Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies*
- *Threshold T-2.1: Causing Substantial Vehicle Miles Traveled (VMT)*
- *Threshold T-2.2: Substantially Inducing Additional Automobile Travel*

- *Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use*

The thresholds were reviewed and analyzed, as detailed in the following Sections 3A-3D.

Section 3A: Threshold T-1

Conflicting with Plans, Programs, Ordinances, or Policies Analysis

Threshold T-1 states that a project would result in an impact if it conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities.

PLANS, PROGRAMS, ORDINANCES, AND POLICIES

Table 2.1-1 of the TAG provides the City plans, policies, programs, ordinances and standards relevant in determining project consistency. Table 2.1-2 of the TAG provides a list of questions to help guide whether a project conflicts with the City's plans, programs, ordinances, or policies. As summarized below, the Project is consistent with the City documents listed in Table 2.1-1 of the TAG; therefore, the Project would not result in a significant impact under Threshold T-1. Detailed discussion of the plans, programs, ordinances, or policies related are provided below.

Mobility Plan

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

1. Safety First: Design and operate streets in a way that enables safe access for all users, regardless of age, ability, or transportation mode of choice.
2. World Class Infrastructure: A well-maintained and connected network of streets, paths, bikeways, trails, and more provides Angelenos with the optimum variety of mode choices.
3. Access for All Angelenos: A fair and equitable system must be accessible to all and must pay particularly close attention to the most vulnerable users.

4. Collaboration, Communication, and Informed Choices: The impact of new technologies on our day-to-day mobility demands will continue to become increasingly important to the future. The amount of information made available by new technologies must be managed responsibly in the future.

5. Clean Environments and Healthy Communities: Active transportation modes such as bicycling and walking can significantly improve personal fitness and create new opportunities for social interaction, while lessening impacts on the environment.

Safety First. Adjacent to the Project Site, Cosmo Street provides two travel lanes, one northbound and one southbound lane, and parking along the west side of the street. Thus, the valet operation zone could safely accommodate vehicles without impediment of pedestrian facilities or traffic at nearby study intersections. Pedestrian facilities along Cosmo Street and Hollywood Boulevard would continue to provide safe access between the Project Site and surrounding destinations to meet the goals of the Mobility Plan. Thus, the Project would be consistent with the Safety First goal.

World Class Infrastructure. The Project is not proposing any new driveways or curb cuts along Hollywood Boulevard or Cosmo Street, a designated Avenue I and local street, respectively, in the Mobility Plan. Hollywood Boulevard has been identified as part of the Mobility Plan's Transit Enhanced Network, Bicycle Enhanced Network, and Pedestrian Enhanced District. The Project would not preclude any transit, bicycle, or pedestrian enhancements along Hollywood Boulevard. Additionally, the Project would provide ground floor restaurant space that will enhance the neighborhood character of Hollywood Boulevard. Thus, the Project would be consistent with the World Class Infrastructure goal.

Access for all Angelenos. The Project does not propose repurposing existing curb space and does not propose narrowing or shifting existing sidewalk placement or paving, narrowing, shifting, or removing an existing parkway. Further, the Project does not propose modifying, removing, or otherwise affecting existing bicycle infrastructure, and the Project valet is not proposed along a street with a bicycle facility. Thus, the Project would be consistent with the Access for All Angelenos goal.

Collaboration, Communication, and Informed Choices. The Project would provide information on mobility options to hotel guests to promote the benefits of alternative transportation modes. Thus, the Project would be consistent with the Collaboration, Communication, and Informed Choices goal.

Clean Environments and Healthy Communities. As part of the Project, secured bicycle parking facilities and pedestrian connections within the Project Site and connecting to off-site pedestrian facilities would be provided. This would promote active transportation modes such as biking and walking. Thus, the Project would be consistent with the Clean Environments and Healthy Communities goal.

The Project is consistent with all applicable policies of the Mobility Plan; therefore, the Project is consistent 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 (Los Angeles Department of City Planning, March 2015) introduces guidelines for the City to follow to enhance the City's position as a regional leader in health and equity, encourage healthy design and equitable access, and increase awareness of equity and environmental issues.

The Project prioritizes safety and access for all individuals utilizing the site by providing direct pedestrian entrances connected to public pedestrian facilities and ADA accessible. Further, the Project supports healthy lifestyles by locating hotel rooms and jobs adjacent to transit (Metro B [Red] Line), providing bicycle amenities, and enhancing the pedestrian environment to provide a more comfortable environment for pedestrians.

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

Land Use Element of the General Plan

The City General Plan's Land Use Element contains 35 Community Plans that establish specific goals and strategies for the various neighborhoods across Los Angeles. This Project falls within the boundaries of the *Hollywood Community Plan* (LADCP, December 1988) (the Community Plan).

The Project would provide amenities for tourists and the ground floor restaurant would help to activate pedestrian space along Hollywood Boulevard. Thus, the Project promotes and encourages development standards in line with the goals and objectives of the Community Plan.

The City is currently in the process of updating the Hollywood Community Plan to guide development for the Hollywood area through Year 2040. *Hollywood Community Plan Update Draft Environmental Impact Report* (Terry A. Hayes Associates, Inc., November 2018) was released for public review in October 2019. Although the City has not released a hearing schedule, formal adoption of the Hollywood Community Plan Update is anticipated in the last quarter of Year 2020 or early Year 2021.

Redevelopment Plan

The Project Site is located within the *Redevelopment Plan for the Hollywood Redevelopment Project* (The Community Redevelopment Agency of the City of Los Angeles, May 2003) (the Redevelopment Plan) area. The Redevelopment Plan outlines a set of goals for community development including employment and business opportunities, improving the quality of the environment in the Hollywood area, supporting Hollywood as the center of the entertainment industry, and promoting the reuse of existing buildings.

The Project would provide commercial jobs in the community while also promoting the vibrancy of the Hollywood neighborhood. Amenities for tourists, along with the ground floor restaurant, would help to activate pedestrian space along Hollywood Boulevard, and the Project would be an adaptive reuse of an existing building. Thus, the Project promotes and encourages development standards in line with the goals and objectives of the Redevelopment Plan.

LAMC Section 12.21.A.16 (Bicycle Parking)

Los Angeles Municipal Code (LAMC) Section 12.21.A.16 details the bicycle parking requirements for new developments, in accordance with Case No. CPC-2016-4216-CA and Council File No. 12-1297-S1.

The Project will satisfy the LAMC requirements for short-term and long-term bicycle parking supply.

LAMC Section 12.26J (TDM Ordinance)

LAMC Section 12.26J, the TDM Ordinance (1993) establishes TDM requirements for non-residential projects, in addition to non-residential components of the mixed-use projects, in excess of 25,000 sf. The restaurant component of the Project is 11,000 sf. Therefore, the requirements of LAMC Section 12.26J do not apply to the Project.

LAMC Section 12.37 (Waivers of Dedications and Improvement)

LAMC Section 12.37 states that a project must dedicate and improve adjacent streets to half-right-of-way (ROW) standards consistent with the street designations of the Mobility Plan. Hollywood Boulevard currently meets the standards for an Avenue I, per the Mobility Plan; therefore, the Project would not be required to provide any street dedications or improvements on Hollywood Boulevard. A dedication of up to 12 feet along Cosmo Street would be required to meet the designated 30-foot half-ROW standards for a Local Street. However, due to the constraints of the existing structure, which has been designated a historic resource, the Project has requested a waiver from the dedication along Cosmo Street, as well as the curb radius dedication requirement on the southeast corner of Cosmo Street & Hollywood Boulevard. Therefore, the Project would be compliant with the requirements of LAMC Section 12.37.

Vision Zero Corridor Plans

Vision Zero implements projects that are designed to increase safety on the most vulnerable City streets. The City has identified a number of streets as part of the High Injury Network where City projects will be targeted. Within the Study Area, Hollywood Boulevard and Selma Boulevard are identified in the City's High Injury Network; however, no Vision Zero Safety Improvements are planned near the Project Site.

The Project improvements to the pedestrian environment would not preclude future Vision Zero Safety Improvements by the City. Thus, the Project does not conflict with Vision Zero.

Citywide Design Guidelines for Residential, Commercial, and Industrial Development

Citywide Design Guidelines (Los Angeles City Planning Urban Design Studio, October 2019) incorporates urban design principles pertaining to pedestrian-first design that serves to reduce VMT.

The Project Site does not introduce a new driveway or loading access along a roadway classified as an Avenue or Boulevard. The Project's valet loading zone would be located along Cosmo Street, a designated Local Street. Although the Project is located on a corner lot, the valet loading zone would be situated along Cosmo Street to ensure that valet operations would not adversely affect traffic operations at the intersection of Cosmo Street & Hollywood Boulevard (Intersection #1).

Walkability Checklist

City of Los Angeles Walkability Checklist – Guidance for Entitlement Review (LADCP, November 2008) serves as a guide for creating improved conditions for pedestrians to travel and contribute to the overall walkability of the City and includes the following topics:

- Sidewalks
- Crosswalks/Street Crossings

- On-Street Parking
- Utilities
- Building Orientation
- Off-Street Parking and Driveways
- On-Site Landscaping
- Building Façade
- Building Signage and Lighting

The Project incorporates many of the recommended strategies applicable to commercial developments, including but not limited to providing continuous and adequate sidewalks along the Project frontage, designing direct primary entrances for pedestrians to be visible and ADA accessible, and locating parking access on a Local Street rather than a designated Avenue or Boulevard.

LADOT Transportation Technology Strategy – Urban Mobility in a Digital Age

The LADOT transportation technology strategy, based on *Urban Mobility in a Digital Age: A Transportation Technology Strategy for Los Angeles* (Ashley Z. Hand, August 2016), is designed to ensure the City stays on top of emerging transportation technologies as both a regulator and a transportation service provider. This strategy document includes the following goals:

- Data as a Service: Providing and receiving real-time data to improve the City's ability to serve transportation needs

- Mobility as a Service: Improving the experience of mobility consumers by encouraging partnerships across different modes and fostering clear communication between transportation service providers

- Infrastructure as a Service: Re-thinking how the City pays for, maintains, and operates public, physical infrastructure to provide more transparency

The Project does not interfere with any of the general policy recommendations and/or pilot proposals set forth by this document.

Mobility Hub Reader's Guide

Mobility Hubs: A Reader's Guide (LADCP, 2016) provides guidance for enhancing transportation connections and multi-modal improvements in proximity to new or existing transit stations.

The Project adopts several of these components, including LAMC-required short-term and long-term bicycle parking that both facilitates and encourages bicycling in and around the Project. Additionally, the Project proposes active uses that support a vibrant and mixed-use environment including a retail land use component.

LADOT Manual of Policies and Procedures (Design Standards)

Manual of Policies and Procedures (LADOT, December 2008) provides plans and requirements for traffic infrastructure features in the City. Section 321 of the Manual of Policies and Procedures provides driveway design and placement guidelines. However, no driveways are proposed as part of this Project, as all parking will be provided via a valet operation. The valet operation would be designed in accordance within LADOT policies and design standards. The Project would not be installing any new curb cuts or make any modifications to the street.

The Project does not interfere with any of the policies and procedures contained in this document. Thus, the Project would not conflict with this document.

CONSISTENCY

The Project is consistent with the City documents listed in Table 2.1-1 of the TAG along with the described documents above; therefore, the Project would not result in a significant impact under Threshold T-1.

CUMULATIVE ANALYSIS

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

Section 3B: Threshold T-2.1
Causing Substantial VMT Analysis

Threshold T-2.1 states that a residential project would result in a significant VMT impact if it would generate household VMT per capita exceeding 15% below the existing average household VMT per capita for the Area Planning Commission (APC) area in which a project 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.

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

VMT METHODOLOGY

The following describes the methodology by which vehicle trips and VMT are calculated in *City of Los Angeles VMT Calculator Version 1.2* (November 2019) (VMT Calculator), as detailed in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, November 2019). LADOT developed the VMT Calculator to estimate project-specific daily household VMT per capita and daily work VMT per employee for developments within City limits, which are based on the following types of one-way trips:

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

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

the work VMT per employee threshold applies to home-based work attraction trips, as the location and characteristics of residences and workplaces are often the main drivers of VMT, as detailed in Appendix 1 of *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Governor's Office of Planning and Research, December 2018). As noted in the TAG, small-scale retail/restaurant 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. Therefore, a no impact determination can be made for the 11,000 sf restaurant component of the Project.

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

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

Source: TAG (LADOT, July 2019)

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

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 and are categorized as follows:

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

The VMT Calculator determines a project's TBZ based on the latitude and longitude of a project address.

Mixed-Use Development Methodology

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

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

VMT

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 zone where a project is located to determine the trip length and trip type, which factor into the calculation of a project's VMT.

Population and Employment Assumptions

As previously stated, the VMT thresholds identified in the TAG are based on household VMT per capita and work VMT per employee. Thus, the VMT Calculator contains population assumptions developed based on Census data for the City and employment assumptions derived from multiple data sources, including *2012 Developer Fee Justification Study* (Los Angeles Unified School District, 2012), the San Diego Association of Governments Activity Based Model, *Trip Generation, 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. The following seven categories of TDM strategies are included in the VMT Calculator:

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

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

PROJECT VMT ANALYSIS

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

The following assumptions were identified in the VMT Calculator:

- APC: Central
    - Household VMT Impact Threshold: N/A
    - Work VMT Impact Threshold: 7.6 VMT per employee
- TBZ: Urban
    - Maximum VMT Reduction: 75%

The VMT analysis results based on the VMT Calculator are summarized in Table 5. Detailed output from the VMT Calculator is provided in Appendix D. The Project proposes no residential units. Therefore, per *City of Los Angeles VMT Calculator User Guide* (LADOT and LADCP, November 2019), the Project would not generate any household VMT per capita and would not result in a significant household VMT impact.

Project VMT

The Project includes several design features, which include measures to reduce the number of single occupancy vehicles trips to the Project Site. For the purposes of this analysis, the following Project design features were accounted for in the VMT evaluation:

- Bicycle parking per LAMC requirements including short-term and long-term spaces

- Pedestrian network connections within the Project Site and connecting to off-site pedestrian facilities

As shown in Table 5, the VMT Calculator estimates that the Project described above would generate a 6,230 daily VMT and an average work VMT per employee of 6.3 with these Project design features in place. The overall work VMT per employee of 6.3 would not exceed the Central APC significant work VMT impact threshold of 7.6 and, therefore, the overall Project would not result in a significant VMT impact and no mitigation measures would be required.

The detailed output from the VMT Calculator is provided in Appendix D.

CUMULATIVE ANALYSIS

Cumulative effects of development projects are determined based on the consistency with the air quality and GHG reduction goals of *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (Southern California Association of Governments, Adopted April 2016) (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 2040 and balances the region's future mobility and housing needs with economic, environmental, and public health goals. In addition, as stated in the TAG, for projects that do not demonstrate an impact by applying an efficiency-based impact threshold (i.e., household VMT per capita, work VMT per employee), 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 greenhouse gas goals of the RTP/SCS.

The Project would not result in a significant VMT impact, as detailed above. Therefore, the Project is not anticipated to result in a cumulative VMT impact under Threshold T-2.1, and no further evaluation or mitigation measures would be required.

Furthermore, the Project includes a mix of hotel and restaurant uses that would likely result in shared trips between the land uses that would remain internal to the Project Site without the utilization of the off-site roadway network. In addition, the Project would encourage a variety of transportation options, as the Project Site is located within 700 feet of the Metro B (Red) Line

Hollywood/Vine Station and is also well-served by various bus lines. In addition, the Project would provide bicycle parking in accordance with LAMC-requirements.

Thus, the Project is consistent with the RTP/SCS goal of maximizing mobility and accessibility in the region. The Project would also contribute to the productivity and use of the regional transportation system by providing employment near transit and encourage active transportation by providing new bicycle parking infrastructure and active street frontages, consistent with RTP/SCS goals.

TABLE 5
VMT ANALYSIS SUMMARY

Project Information	
Land Use	**Size**
Housing | Hotel	90 rooms
Retail | High-Turnover Sit-Down Restaurant	11,000 sf
Project Analysis [a]	
Project Area Planning Commission	Central Los Angeles
Travel Behavior Zone	Urban
Maximun Allowable VMT Reduction	75%
VMT Analysis [b]	
Daily Vehicle Trips	951
Daily VMT	6,230
Household VMT per Capita [c]	0.0
Impact Threshold	6.0
Significant Impact	-
Work VMT per Employee [d]	6.3
Impact Threshold	7.6
Significant Impact	NO

Notes

[a] Project Analysis based on the *City of Los Angeles VMT Calculator Version 1.2* (November 2019).

[b] Project design features include:

1. Bicycle parking per LAMC requirements
2. Pedestrian network improvements within project and connecting off-site

[c] Based on home-based production trips only (see Appendix D, Report 4).

[d] Based on home-based work attraction trips only (see Appendix D, Report 4).

Section 3C: Threshold T-2.2

Substantially Inducing Additional Automobile Travel Analysis

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

The Project does not propose a transportation project that would induce substantial automobile travel. Therefore, the Project is not anticipated to result in a cumulative VMT impact under Threshold T-2.1, and no further evaluation or mitigation measures would be required.

Section 3D: Threshold T-3

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

Further evaluation is required for projects that propose new access points or modifications along the public ROW (i.e., street dedications) under Threshold T-3. A review of Project access points, internal circulation, and parking access would determine if the Project would substantially increase hazards due to geometric design features, including safety, operational, or capacity impacts.

The Project's valet loading zone would be located along Cosmo Street. Pedestrian access to the Project would be provided along Hollywood Boulevard and Cosmo Street.

As previously detailed, parking for the Project would be fully valet-operated, with parking provided at an existing off-site surface parking lot. No additional access points or excessive driveway widening are proposed. No unusual or new obstacles are presented in the design that would be considered hazardous to motorized vehicles, non-motorized vehicles, or pedestrians.

The valet loading zone would not present significant safety issues regarding traffic/pedestrian conflicts and would operate in accordance with LADOT standards. No exceptional horizontal or vertical curvatures exist along Cosmo Street that would create sight distance issues for traffic utilizing the valet loading zone. As previously discussed, no street dedications on Hollywood Boulevard along the Project frontage would be required to meet City standards. A 12-foot dedication would be required on Cosmo Street; however, a waiver of dedication of improvements was requested by the Project due to the Project Site's historical resource designation.

Based on the site plan review and design assumptions, the Project does not present any geometric design hazards related to traffic movement, mobility, or pedestrian accessibility, and is considered less than significant.

CUMULATIVE ANALYSIS

None of the Related Projects provide access along the same block as the Project. Thus, the Project and Related Projects would not result in a cumulative impact under Threshold T-3.

Chapter 4
Non-CEQA Transportation Analysis

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

NON-CEQA TRANSPORTATION ANALYSIS METHODOLOGY

The non-CEQA transportation analysis includes an assessment of the (i) Project's potential effect on pedestrian, bicycle, and transit facilities, (ii) Project access, safety, and circulation, and (iii) Project construction. Intersection operations 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 five intersections, three signalized and two unsignalized, in the vicinity of the Project Site were selected for detailed transportation analysis and are shown in Figure 2.

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

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

Operational Evaluation

In accordance with the TAG, the intersection delay and queue analyses for the operational evaluation were conducted using the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology, which was implemented using Synchro software and signal timing worksheets from the City to analyze intersection operating conditions. The HCM signalized methodology calculates the average delay, in seconds, for each vehicle passing through the intersections, while the HCM unsignalized methodology calculates the control delay, in seconds, for individual approaches of an intersection. Table 6 presents a description of the LOS categories, which range from excellent, nearly free-flow traffic at LOS A, to stop-and-go conditions at LOS F, for signalized and unsignalized intersections. The queue lengths were estimated using Synchro, which reports the 85th percentile queue length, in feet, for each approach lane. The reported queues are calculated using the HCM signalized and unsignalized intersection methodology.

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

Section 4A
Project Traffic

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

PROJECT TRIP GENERATION

The number of trips expected to be generated by the hotel and restaurant components of the Project was estimated using rates published in *Trip Generation, 10th 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. The Project is located within 700 feet walking distance of the Metro B (Red) Line Hollywood/Vine Station; therefore, in accordance with the TAG, a 15% transit/walk-in adjustment was made to Project trips to account for transit usage and walking arrivals from the surrounding neighborhoods and adjacent commercial developments. A 20% pass-by reduction was also applied to the restaurant trip generation to account for trips made by drivers already passing by the Project Site and stopping on their way to another destination. Further, the restaurant trip generation was reduced by a 20% internal capture credit to account for person trips made by hotel guests to the restaurant, as is common within a mixed-use development.

As shown in Table 7, after accounting for the adjustments above, the Project is expected to generate 94 morning peak hour trips (54 inbound trips, 40 outbound trips) and 104 afternoon peak hour trips (60 inbound trips, 44 outbound trips). As previously noted, the site plan and land use program could be further refined through the entitlement process. Therefore, the trip estimates shown in Table 7 provide a conservative analysis.

PROJECT TRIP DISTRIBUTION

Similar to the trip distribution of traffic for the Related Projects described in Chapter 2, the geographic distribution of trips generated by the Project is dependent on the location of employment, residential, and commercial centers to and from which patrons of the Project would be drawn, characteristics of the street system serving the Project Site, access to Project, and existing traffic conditions.

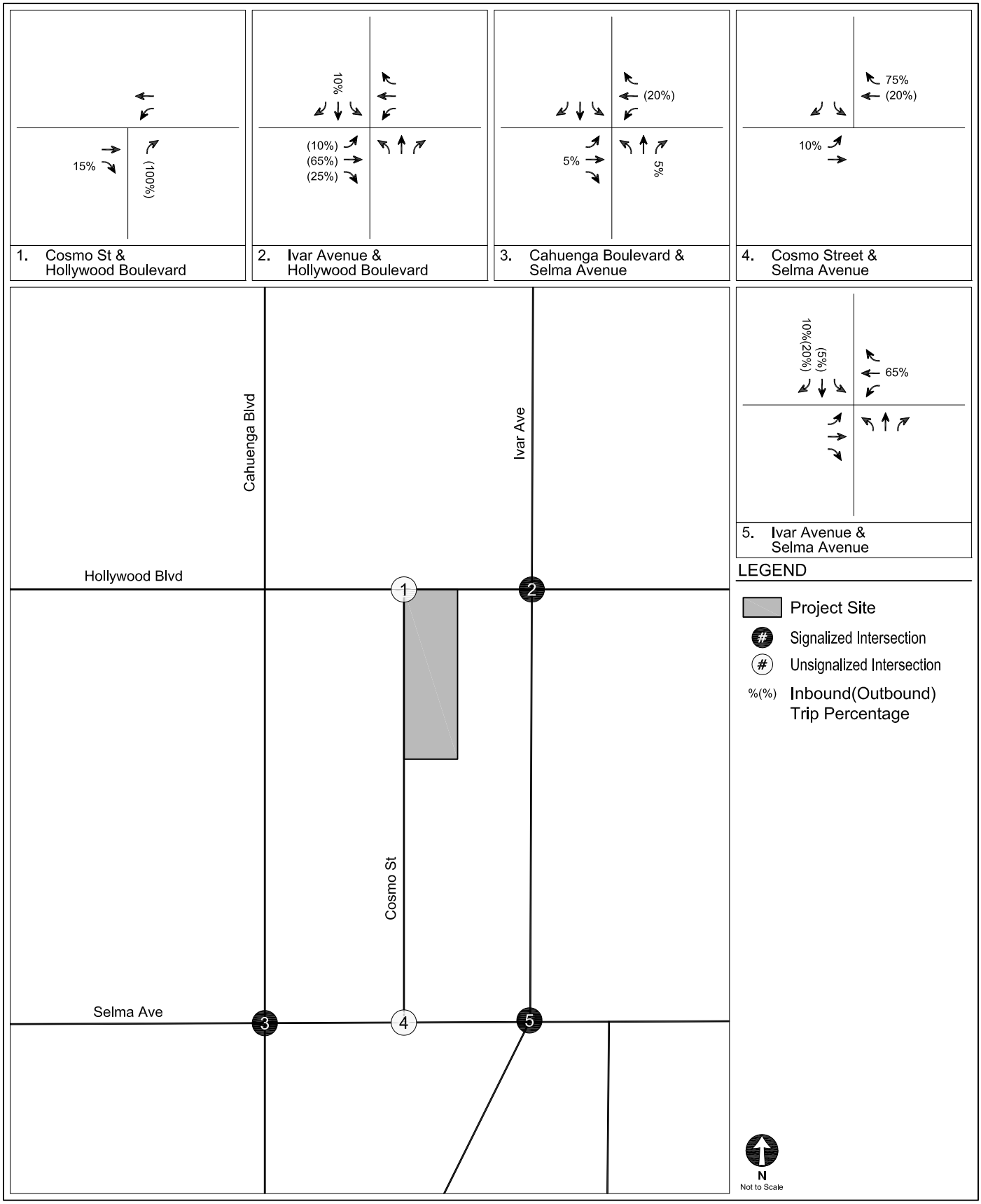
Based on these considerations, traffic entering and exiting the Project was assigned to the surrounding street system. Figure 11A shows the hotel intersection-level trip distribution pattern and valet operation and Figure 11B shows the restaurant intersection-level trip distribution pattern and valet operation.

Generally, the pattern is as follows:

- 35% Hotel / 10% Restaurant to/from the north
- 25% Hotel / 15% Restaurant to/from the south
- 15% Hotel / 35% Restaurant to/from the east
- 25% Hotel / 40% Restaurant to/from the west

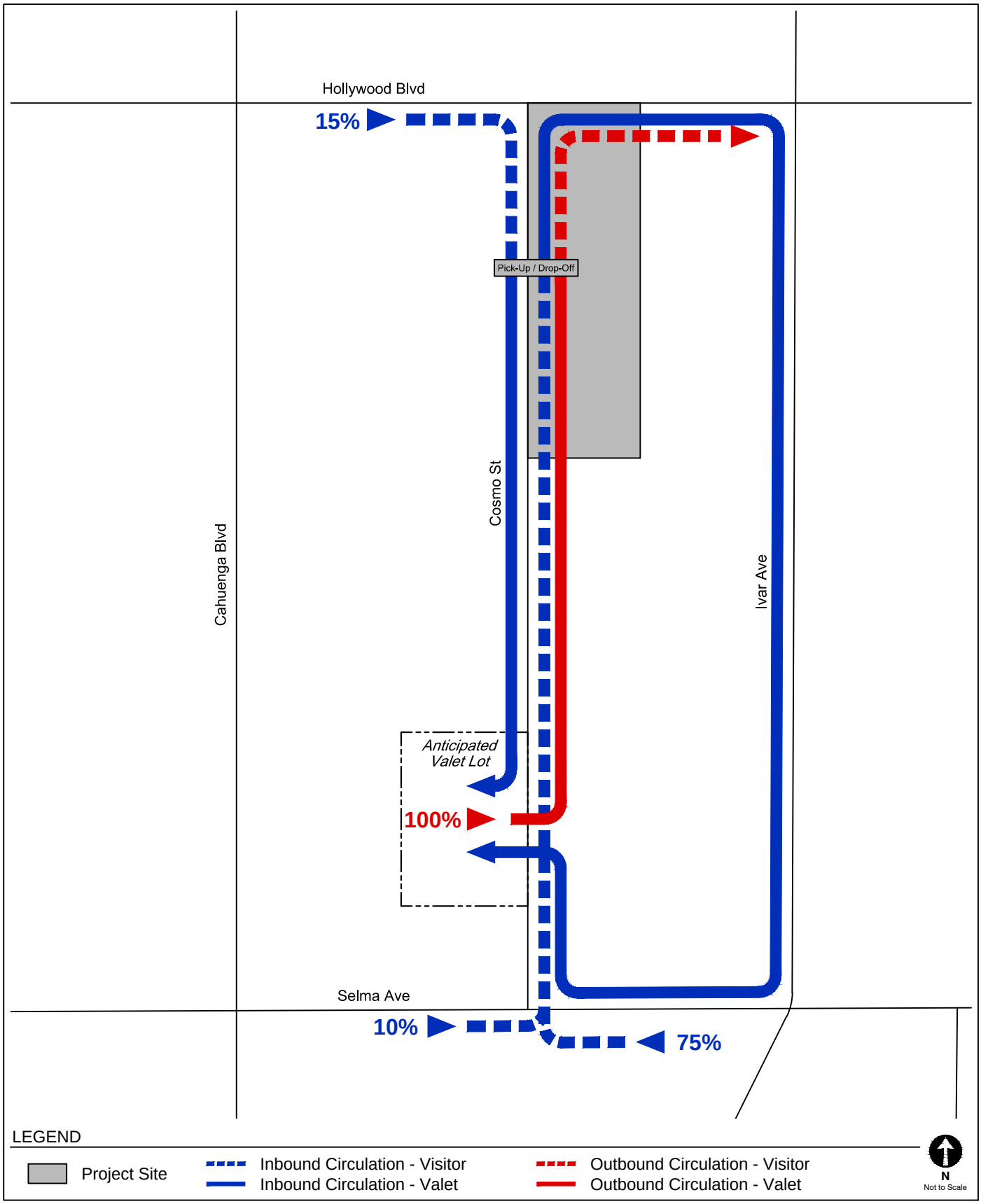
PROJECT TRIP ASSIGNMENT

The Project trip generation estimates summarized in Table 7 and the trip distribution pattern shown in Figure 11 were used to assign the Project-generated traffic through the study intersections. Figure 12 illustrates the net Project-only traffic volumes for the Project at the study intersections during typical weekday morning and afternoon peak hours.



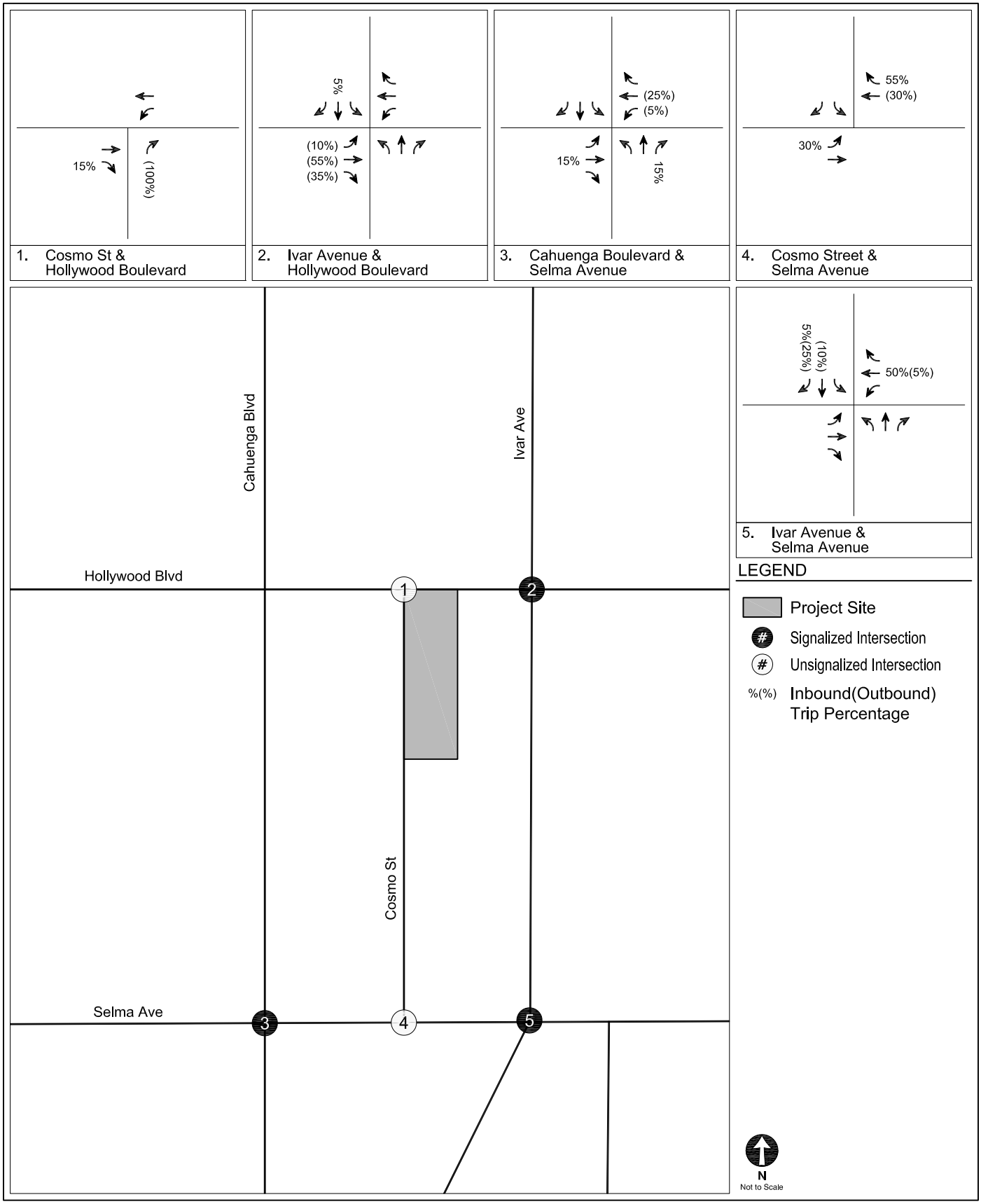
PROJECT TRIP DISTRIBUTION
HOTEL

FIGURE
11A

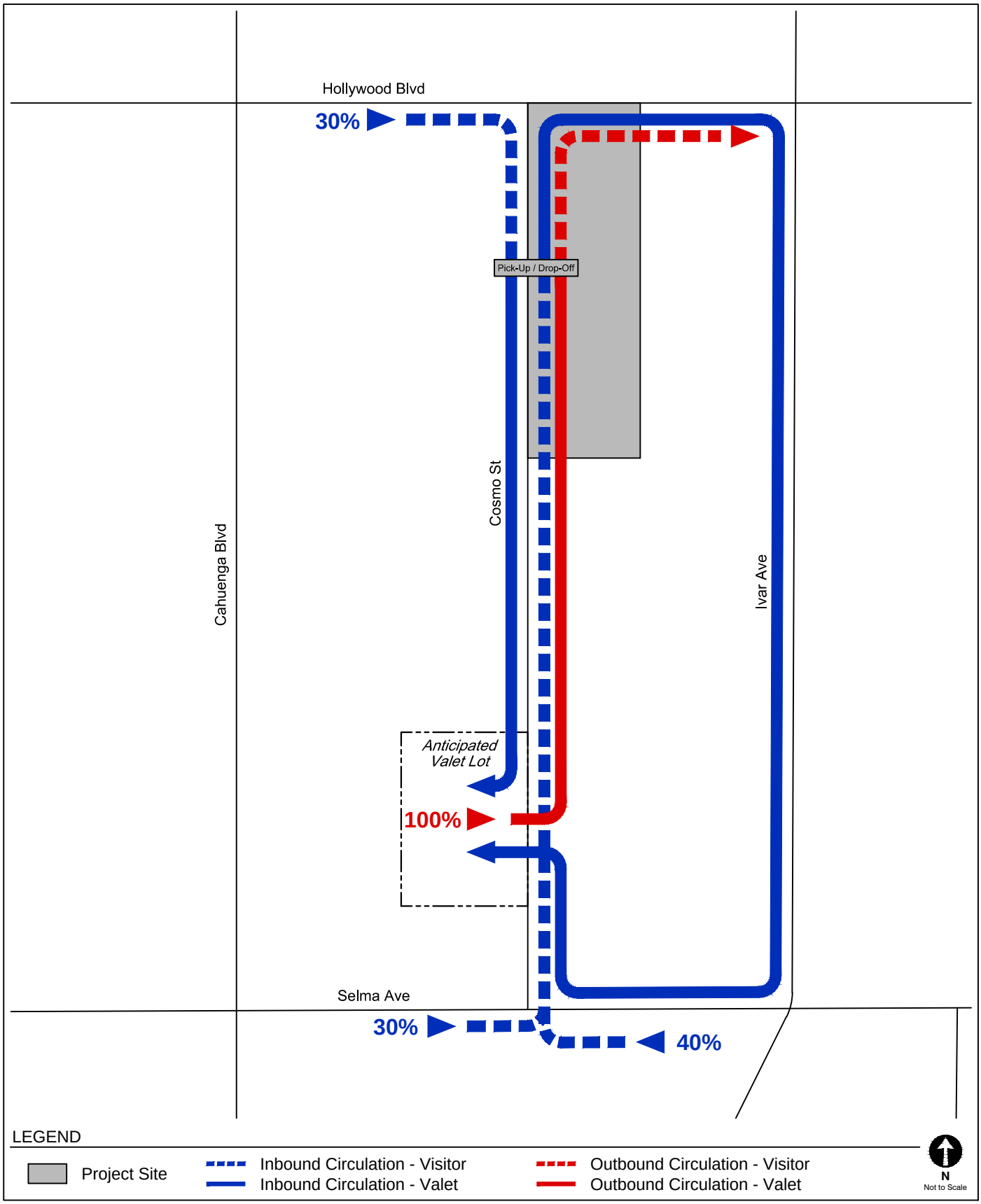


VALET OPERATIONS
HOTEL

FIGURE
11A (CONT.)

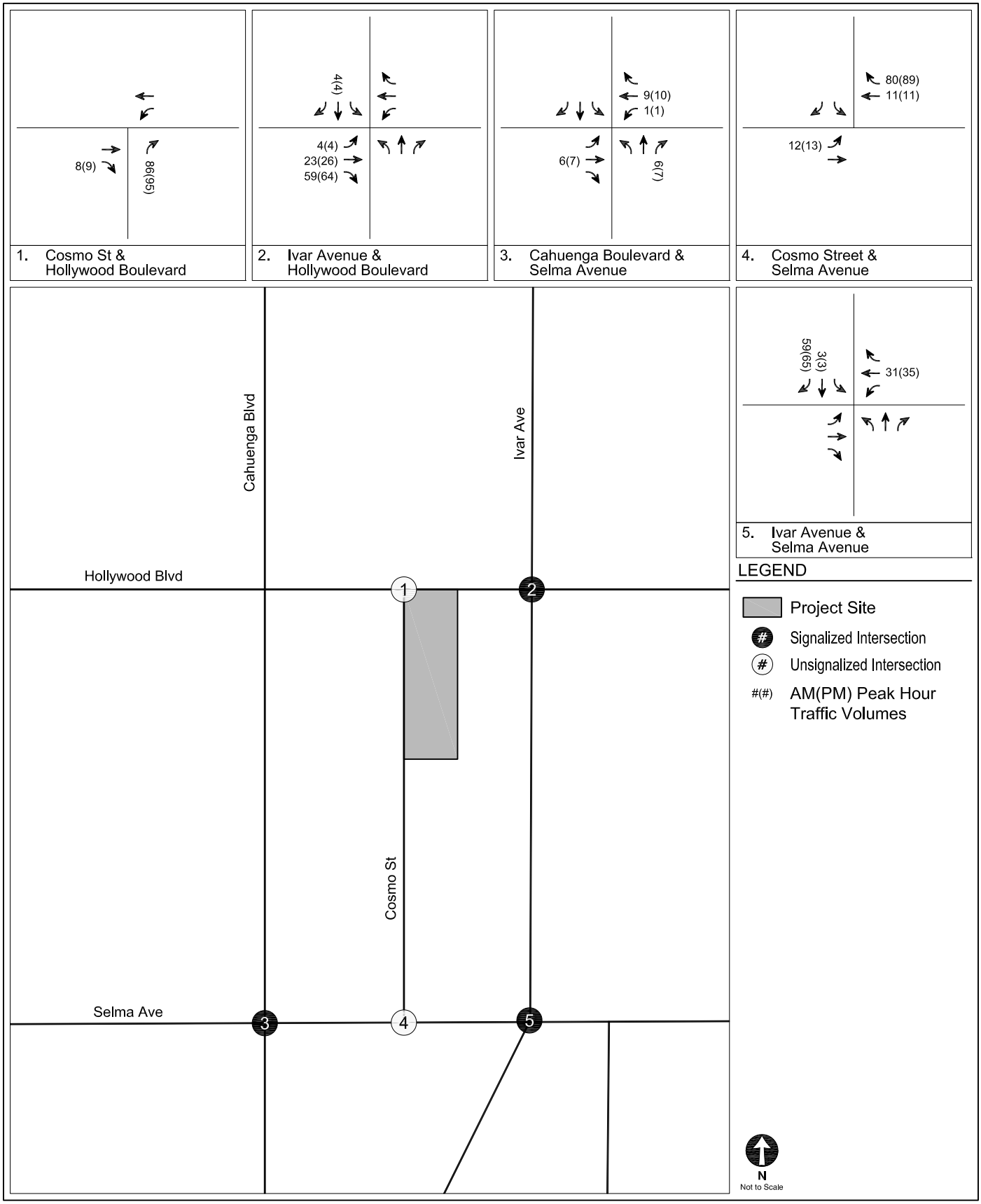


PROJECT TRIP DISTRIBUTION RESTAURANT	FIGURE 11B



VALET OPERATIONS
RESTAURANT

FIGURE
11B (CONT.)



PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
12

TABLE 6
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

Level of Service	Definition	Delay [a]	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	0.0 - 10.0	0.0 - 10.0
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	10.1 - 20.0	10.1 - 15.0
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	20.1 - 35.0	15.1 - 25.0
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	35.1 - 55.0	25.1 - 35.0
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	55.1 - 80.0	35.1 - 50.0
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80.0	> 50.0

Notes

Source: *Highway Capacity Manual, 6th Edition (* Transportation Research Board, 2016).

[a] Measured in seconds.

TABLE 7
TRIP GENERATION ESTIMATES

Land Use	Size	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Trip Generation Rates [a]							
Hotel (ITE 310)	per room	59%	41%	0.47	51%	49%	0.60
High-Turnover Restaurant (ITE 932)	per 1,000 sf	55%	45%	9.94	62%	38%	9.77
Proposed Project [b]							
Hotel	90 rooms	25	17	42	28	26	54
Less 15% Transit/Walk Adjustment [c]		*(4)*	*(3)*	*(7)*	*(4)*	*(4)*	*(8)*
Subtotal - Hotel		**21**	**14**	**35**	**24**	**22**	**46**
Restaurant [d]	11,000 sf	60	49	109	66	41	107
Less 20% Internal Capture Adjustment [e]		*(12)*	*(10)*	*(22)*	*(13)*	*(8)*	*(21)*
Less 15% Transit/Walk Adjustment [b]		*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Less 20% Pass-By Adjustment [f]		*(8)*	*(7)*	*(15)*	*(9)*	*(6)*	*(15)*
Subtotal - Restaurant		**33**	**26**	**59**	**36**	**22**	**58**
Total - Net New Project Trips		**54**	**40**	**94**	**60**	**44**	**104**

Notes

[a] Source: *Trip Generation, 10th Edition,* Institute of Transportation Engineers, 2017.

[b] The site pland and land use program could be further refined through the entitlement process. However, the Project reflects the maximum building envelope to provide a conservative analysis.

[c] Per LADOT's *Transportation Assessment Guidelines* (LADOT, 2019), the Project Site is located within a 0.25 miles walking distance from a transit station (Metro B Line Hollywood / Vine Station), therefore a 15% transit adjustment was applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments, and for arrivals via taxi, tour bus, and carpool services.

[d] Hotel trip rates includes ancillary conference/meeting rooms, a lobby lounge and bar, rooftop bar and lounge, guest amenities, as well as retail and restaurant space. However, the restaurant/lounge area within the hotel was conservatively analyzed separately.

[e] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development (e.g., hotel guests visiting the restaurant use).

[f] 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.

Section 4B

Project Access, Safety, and Circulation Assessment

This section summarizes the site access, safety, and circulation of the Project Site. It includes an evaluation of the expected access and circulation operations of the Project.

VEHICLES

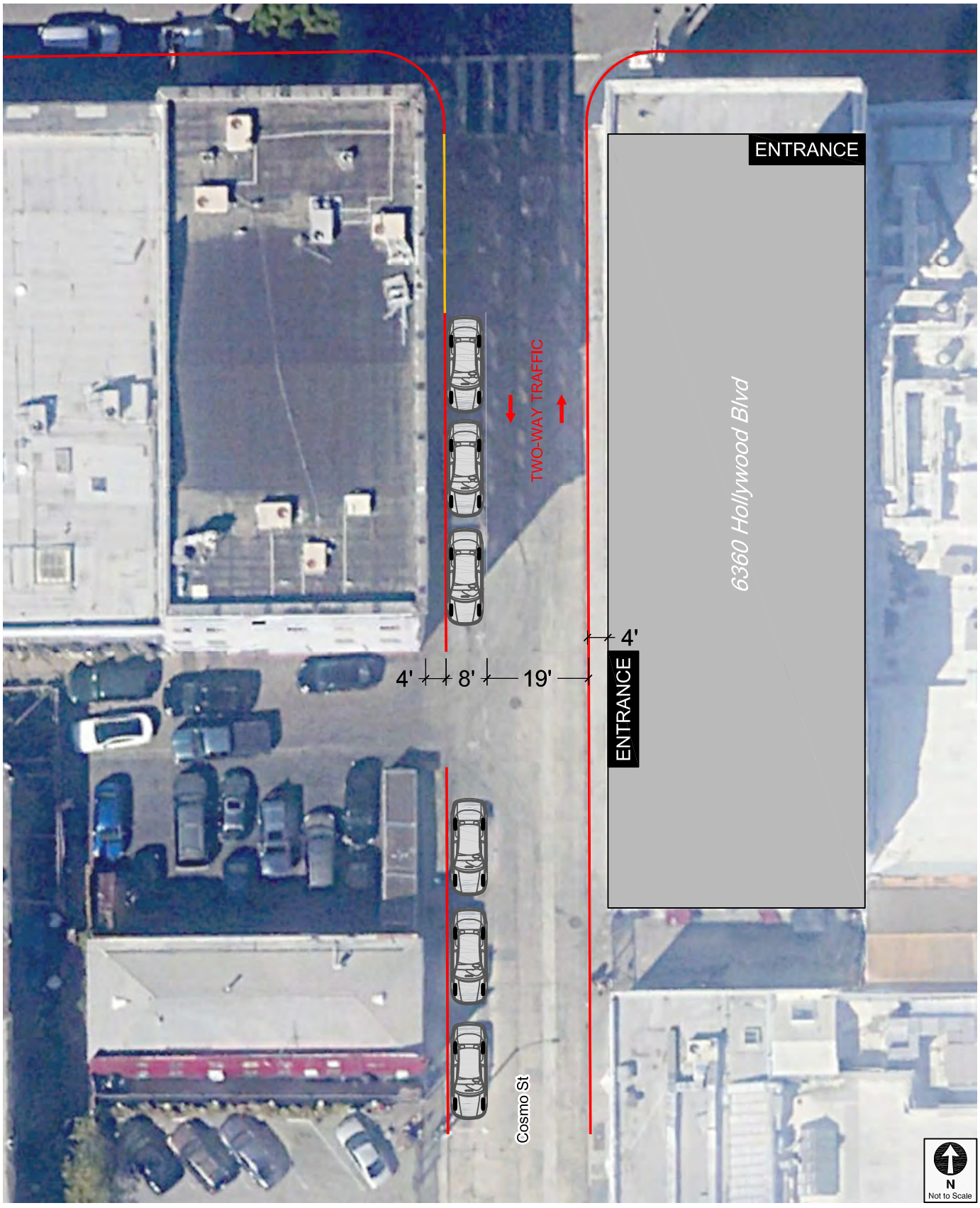
As previously described, the Project would be fully valet-operated, with all Project-related parking provided within an existing off-site surface parking lot. For the purposes of this study, the parking lot was assumed to be located at 1611 Cosmo Street, on the west side of Cosmo Street south of the Project, and would be utilized for valet parking. Other parking facilities in the vicinity of the Project Site with similar capacity could also be utilized. The circulation plan for the Project, as illustrated in Figures 11A and 11 B, includes a valet pick-up/drop-off area located along the west side of Cosmo Street near the Project Site. Cosmo Street currently accommodates two-way traffic operations within an approximately 27-foot wide roadway with curbside parking on the west side. Curbside parking is prohibited on the east side of the street. As Cosmo Street is a designated Local Street, there is no pavement marking (e.g., double yellow center line) to delineate opposing directions of travel. The valet operators would utilize Ivar Avenue and Selma Avenue to travel between the off-site parking lot and the valet area.

As illustrated in Figure 13, the Project would facilitate valet operations on the west side of Cosmo Street, either through the utilization of the existing commercial loading zone or the removal of existing on-street parking meters. Use of the commercial loading zone would be shared with other properties on the block. Project visitors would cross Cosmo Street at Hollywood Boulevard to access the Project Site using the existing pedestrian facilities. It is anticipated that the existing configuration of Cosmo Street would adequately accommodate the Project valet traffic and operations.

PEDESTRIANS AND BICYCLES

Pedestrian access to the Project entrances would be provided along Hollywood Boulevard and Cosmo Street via sidewalks and crosswalks. Hollywood Boulevard and Cosmo Street intersect at right angles that provide adequate sight distance to minimize driver and pedestrian visibility issues. Street trees and other potential impediments that affect driver and pedestrian visibility would be minimal.

Visitors, residents and employees arriving by bicycle would have the same access opportunities as pedestrian visitors. In order to facilitate bicycle use, short-term and long-term bicycle parking spaces would be provided, consistent with LAMC Section 12.21 A16. Vehicular and pedestrian/bicyclist conflicts would be avoided since vehicles would not need to traverse a driveway at the Project Site.



EXISTING CONDITIONS

FIGURE 13

Section 4C

Pedestrian, Bicycle, and Transit Assessment

This section assesses the Project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the Project Site.

Factors to consider when assessing a project's potential effect on pedestrian, bicycle, and transit facilities, include the following:

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

PEDESTRIANS AND BICYCLES

The Project would not directly or indirectly result in a permanent removal or modification that would lead to the degradation of pedestrian or bicycle facilities. Although the Project may intensify use of existing pedestrian and bicycle facilities, the Project would provide adequate measures to ensure the safety of those accessing the site and utilizing the street system surrounding it.

TRANSIT

As detailed in Chapter 2, the Study Area is served by numerous established transit routes. The Project is served by multiple bus lines along Hollywood Boulevard operated by Metro and DASH. Additionally, the Metro B (Red) Line Hollywood/Vine Station is within 700 feet of the Project Site.

Although the Project (and other Related Projects) will cumulatively add transit ridership, the Project Site and the Study Area are served by a vast amount of transit service, as detailed in above. As shown in Tables 3A and 3B, the total residual capacity of the bus and rail lines within

the Study Area during the morning and afternoon peak hours is approximately 6,218 and 5,359 transit trips, respectively. The total Project morning and afternoon peak hour trips are projected to be 20 and 21 trips, respectively, or approximately 0.3% and 0.4% of the total residual capacity of the transit lines within the Study Area during the morning and afternoon peak hours. Overall, the total transit capacity along the routes of those lines can accommodate the Project's transit trips.

Section 4D
Operational Evaluation

This section provides a quantitative evaluation of the Project's access and circulation operations, including the anticipated LOS at the study intersections and anticipated traffic queues.

LOS ANALYSIS

The intersection analysis was conducted based on the HCM methodologies to identify delay and LOS at each of the study intersections with development of the Project. Detailed LOS calculation worksheets are provided in Appendix C.

Existing with Project Conditions

Traffic Volumes. The Project-only morning and afternoon peak hour traffic volumes shown in Figure 12 were added to the existing morning and afternoon peak hour traffic volumes shown in Figure 7. The resulting volumes are illustrated in Figure 14 and represent Existing with Project Conditions, assuming Project operation under Existing Conditions.

Intersection LOS. Table 8 summarizes the weekday morning and afternoon peak hour LOS results for each of the study intersections under Existing and Existing with Project Conditions. As shown in Table 8, all five study intersections operate at LOS D or better during both the morning and afternoon peak hours under both Existing Conditions and Existing with Project Conditions.

Future with Project Conditions

All future cumulative traffic growth (i.e., ambient and Related Project traffic growth) and transportation infrastructure improvements described in Chapter 3 are incorporated into this analysis.

Traffic Volumes. The Project-only morning and afternoon peak hour traffic volumes shown in Figure 12 were added to the Future without Project (Year 2022) morning and afternoon peak hour traffic volumes shown in Figure 10. The resulting volumes are illustrated in Figure 15 and represent Future with Project Conditions after development of the Project in Year 2022.

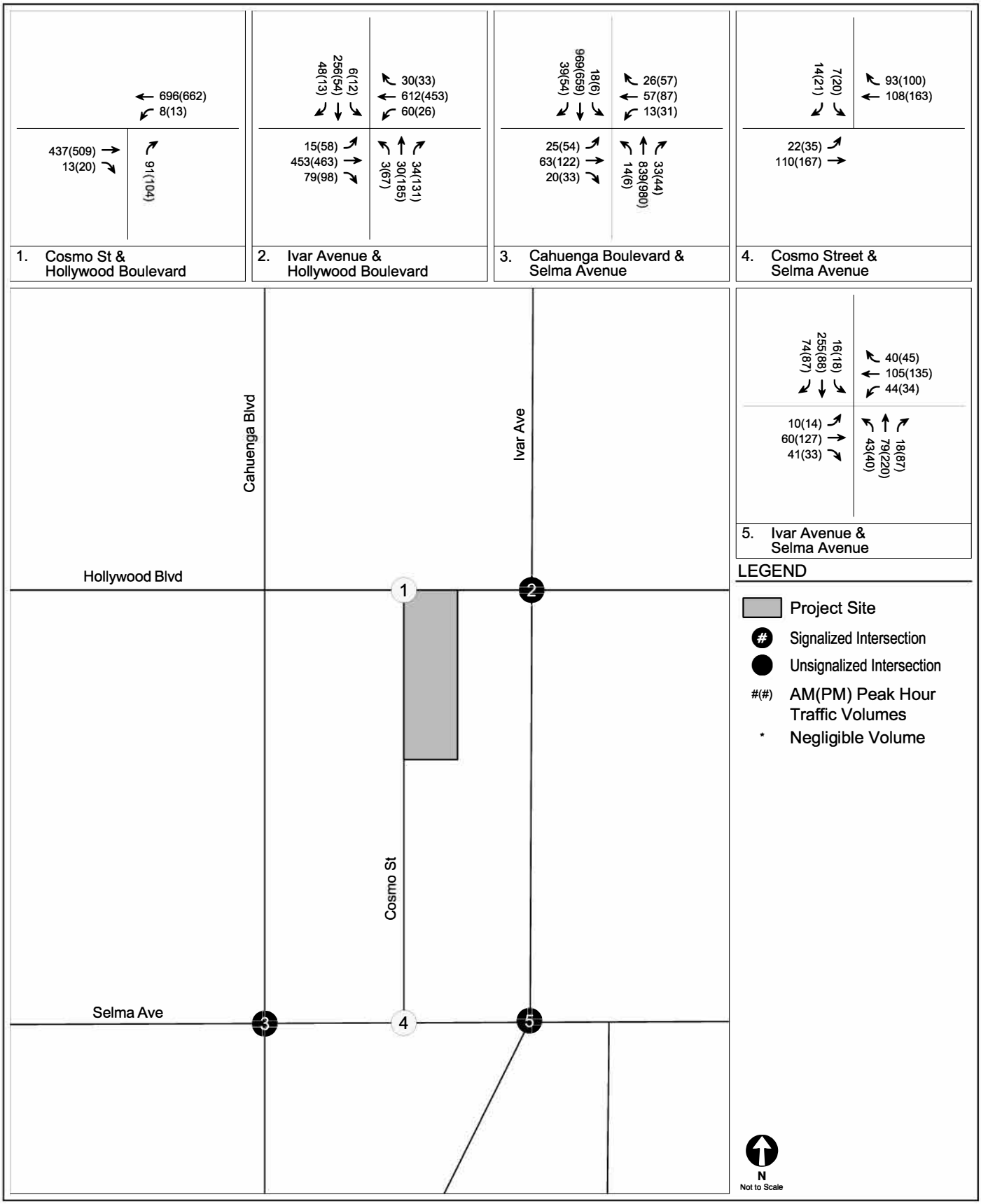
Intersection LOS. Table 9 summarizes the results of the Future without Project (Year 2022) and Future with Project Conditions during the weekday morning and afternoon peak hours for the three study intersections. As shown in Table 9, all five study intersections are anticipated to operate at LOS D or better during both the morning and afternoon peak hours under both Future without Project and Future with Project Conditions.

INTERSECTION QUEUING ANALYSIS

The study intersections were analyzed to determine whether the Project would cause vehicle queues to extend beyond the available storage lengths.

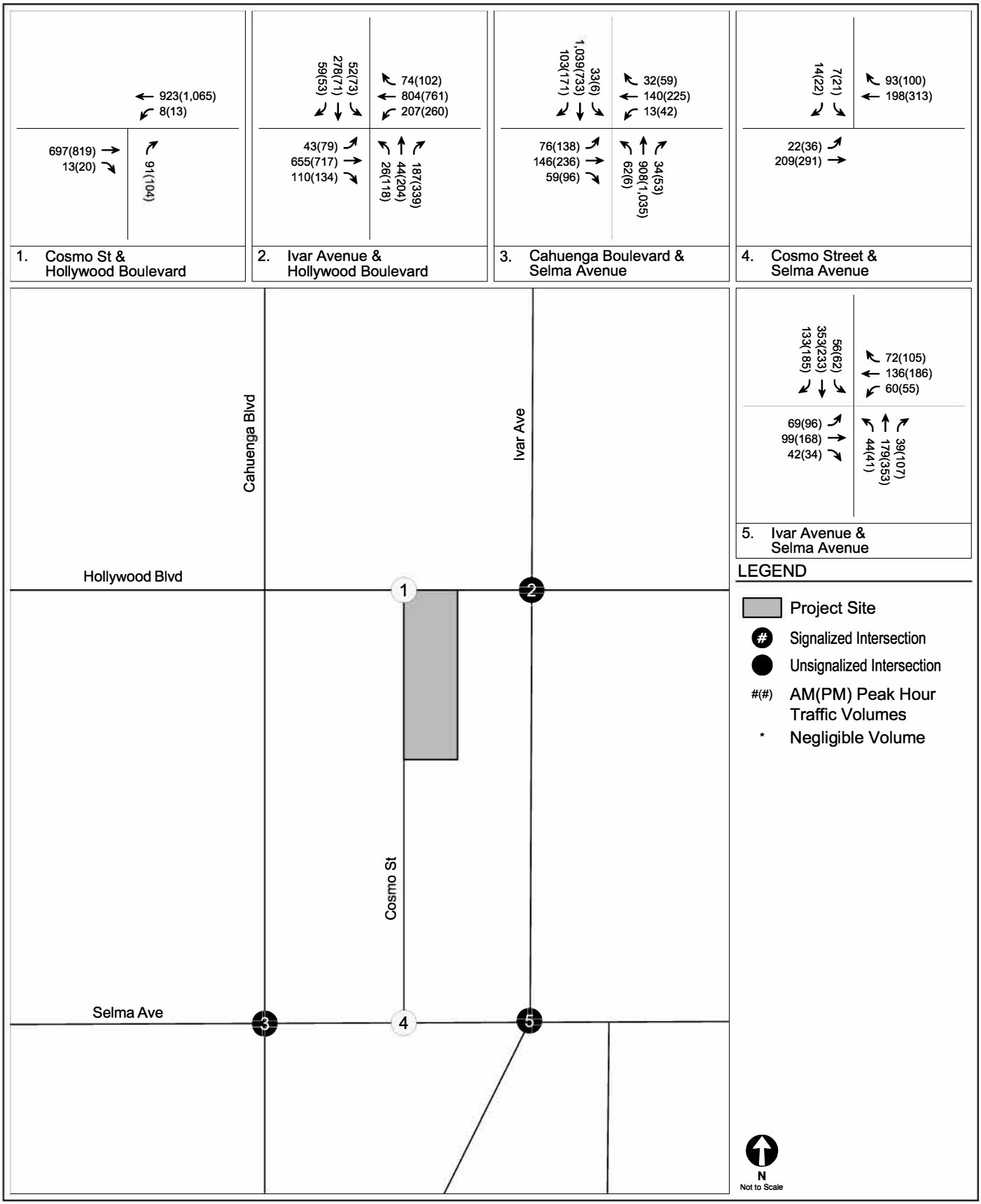
The queue lengths were estimated using Synchro software, which reports the 85th percentile queue length, in feet, for each approach lane. The queue length for unsignalized intersections uses the 95th percentile number of vehicles that can be multiplied by 25 feet to represent the average length of a vehicle. The reported queues are calculated using the HCM signalized and unsignalized intersection methodology.

Based on the analysis in the queuing worksheets, provided in Appendix C, the Project would not cause vehicle queues at the adjacent study intersections to extend beyond the available storage capacity.



EXISTING WITH PROJECT CONDITIONS (YEAR 2019)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
14



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

FIGURE 15

TABLE 8
EXISTING CONDITIONS (YEAR 2019)
INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Exisiting Conditions		Existing with Project Conditions	
			Delay	LOS	Delay	LOS
1. [a]	Cosmo Street & Hollywood Boulevard	AM PM	0.1 0.3	A A	0.8 1.1	A A
2.	Ivar Avenue & Hollywood Boulevard	AM PM	13.3 13.6	B B	13.1 13.5	B B
3.	Cahuenga Boulevard & Selma Avenue	AM PM	5.4 9.6	A A	5.7 9.9	A A
4. [a]	Cosmo Street & Selma Avenue	AM PM	1.1 1.5	A A	1.1 1.5	A A
5.	Ivar Avenue & Selma Avenue	AM PM	8.9 10.5	A B	9.0 10.1	A B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Synchro 10 (HCM 6th Edition methodology)

[a] Worst-case approach delay is reported for two-way stop-controlled intersections.

TABLE 9
FUTURE CONDITIONS (YEAR 2022)
INTERSECTION LEVELS OF SERVICE

No	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions	
			Delay	LOS	Delay	LOS
1. [a]	Cosmo Street & Hollywood Boulevard	AM PM	0.1 0.3	A A	0.7 0.9	A A
2.	Ivar Avenue & Hollywood Boulevard	AM PM	17.1 37.4	B D	17.4 41.4	B D
3.	Cahuenga Boulevard & Selma Avenue	AM PM	10.5 14.3	B B	10.8 14.5	B B
4. [a]	Cosmo Street & Selma Avenue	AM PM	0.7 1.1	A A	0.8 1.1	A A
5.	Ivar Avenue & Selma Avenue	AM PM	8.7 14.2	A B	8.5 14.7	A B

Notes

Delay is measured in seconds per vehicle

LOS = Level of service

Results per Synchro 10 (HCM 6th Edition methodology)

[a] Worst-case approach delay is reported for two-way stop-controlled intersections.

Section 4E

Residential Street Cut-Through Analysis

This section summarizes the residential street cut-through analysis for the Project. The residential street cut-through analysis determines potential increases in average daily traffic volumes on designated Local Streets, as classified in the Mobility Plan, that can be identified as cut-through trips generated by the Project and that can adversely affect the character and function of those streets.

Section 3.5.2 of the TAG provides a list of questions to assess whether the Project would negatively affect residential streets. The Project valet pick-up/drop-off is located along Cosmo Street so as not to intrude on the arterial streets (i.e., Hollywood Boulevard) adjacent to the Project. Additionally, the Project is not adding substantial traffic to the Local Streets or adding substantial traffic to congested arterials streets to cause a shift to alternative local routes, as illustrated in Figure 12. As such, the Project would not excessively burden any residential Local Streets.

Section 4F

Construction Impact Analysis

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

CONSTRUCTION EVALUATION CRITERIA

Section 3.4.3 of the TAG identifies three types of in-street construction impacts that require further analysis to assess the effects of Project construction on the existing pedestrian, bicycle, transit, or vehicle circulation. The three types of impacts and related populations are:

1. Temporary transportation constraints – potential impacts on the transportation system
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

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 users of the transportation system, and consideration for public safety. Construction activities could potentially interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas. As detailed in Section 3.4.4 of the TAG, the proposed construction plans should be reviewed to determine whether construction activities would require any of the following actions:

- Street, sidewalk, or lane closures
- Blockage of existing vehicle, bicycle, or pedestrian access along a street or to parcels fronting the street
- Modification of access to transit stations, stops, or facilities during revenue hours

- Closure or movement of an existing bus stop or rerouting of an existing bus line
- Creation of transportation hazards

PROPOSED CONSTRUCTION SCHEDULE

The Project is anticipated to be constructed over a period of approximately 24 months with a completion date in Year 2022. The construction period would include sub-phases of demolition, core and shell, and interior finish. Peak haul truck and construction worker activity is anticipated to occur during the overlapping sub-phases of demolition phase and the core and shell phase of construction. Therefore, the overlapping of these phases would represent the worst-case conditions during construction activities and was studied in greater detail.

With the implementation of the Construction Management Plan, which is described in more detail below, it is anticipated that worker trips to and from the Project Site would also occur outside of the peak hours. Therefore, no peak hour construction traffic impacts are expected during construction.

DEMOLITION AND CORE AND SHELL PHASES

The estimated number of construction workers each day depends on the phase of construction. According to construction projections prepared for the Project, the building period where the subphase of demolition and of core and shell overlap would employ the most construction workers, with a maximum of approximately 100 workers per day for all components of the building (i.e., framing, plumbing, elevators, inspections, finishing). Additionally, four haul trucks per day are assumed during this period. However, since the different building components would not be constructed or installed simultaneously, this cumulative estimate likely overstates the number of workers and haul trucks that would be expected on the peak construction day. Furthermore, on most of the estimated workdays to complete the Project, there would be far fewer workers than on the peak day. Therefore, the estimate of 100 workers per day used for the purposes of this analysis represents a very conservative estimate.

Assuming minimal carpooling amongst the construction 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, 100 workers would result in a total of 89 vehicles that would arrive and depart from the Project Site each day, which equates to 178 daily trips (89 inbound and 89 outbound trips).

For the purposes of analysis, heavy vehicles were converted into passenger car equivalencies (PCEs). *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, (Transportation Research Board, 1980) *(Circular No. 212)* defines 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 *Circular No. 212* and Exhibit 12-25 of *6TH Edition Highway Capacity Manual* (Transportation Research Board, 2017) suggest a PCE of 2.0 for trucks for the local terrain. Therefore, the four daily haul trucks would be equivalent to 16 PCE trips (eight inbound, eight outbound trips).

In total, the peak construction period would generate 194 daily trips (97 inbound, 97 outbound). However, with implementation of the Construction Management Plan, all construction trips would occur outside of the peak hours, as described above. As such, the overlapping building phase of demolition and core and shell construction is not anticipated to adversely affect traffic operations at any of the study intersections.

During construction, adequate parking for construction workers would be provided in an off-site public parking structure. Restrictions on workers parking in the public right-of-way in the vicinity of (or adjacent to) the Project Site would be identified as part of the Construction Management Plan. All construction materials storage and truck staging would occur along Hollywood Boulevard and Cosmo Street.

POTENTIAL IMPACTS ON ACCESS, TRANSIT, AND PARKING

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

related impacts associated with access and transit are anticipated to be less than significant, and the implementation of the Construction Management Plan described below would further reduce those impacts.

Access

Construction activities are expected to occur primarily along Hollywood Boulevard and Cosmo Street and within the Project Site boundaries. Adjacent to the Project Site, sidewalks along Hollywood Boulevard may be narrowed along the Project frontage to accommodate scaffolding and staging of materials throughout the construction period; however, pedestrian access would be maintained. Safety precautions for pedestrians and bicyclists would be implemented as appropriate. The eastbound travel lanes would be maintained throughout construction activities, although the curb lane, which is 20 feet wide, may be narrowed. Since the travel lanes would be maintained, no temporary impacts to traffic operations along Hollywood Boulevard are anticipated. Emergency access along Hollywood Boulevard would not be impeded.

Cosmo Street would be partially closed adjacent to the Project Site to accommodate scaffolding and staging of materials throughout the Project construction period, however, two-way traffic operations would be maintained with the implementation of temporary traffic controls (i.e., flag men). The sidewalk on the east side of the street adjacent to the Project would be closed for pedestrian access. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan. Given the low volume of traffic on Cosmo Street, temporary impacts to traffic operations due to construction activities are not anticipated. Emergency access along Cosmo Street would not be impeded.

The Construction Management Plan would include measures to ensure pedestrian and bicycle safety along the affected sidewalks, bicycle facilities, and temporary walkways (e.g., use of directional signage, maintaining continuous and unobstructed pedestrian paths, and/or providing overhead covering).

Transit

There are currently no bus stop locations along the Project frontages on Hollywood Boulevard or Cosmo Street. Bus stop relocation or bus rerouting is not required; therefore, no temporary impacts to transit are expected.

Parking

No parking is allowed on Hollywood Boulevard or Cosmo Street adjacent to Project Site. No loss of on-street parking would occur; therefore, no temporary impacts to parking are expected.

CONSTRUCTION MANAGEMENT PLAN

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

- Advance, bilingual notification of adjacent property owners and occupants of upcoming construction activities, including durations and daily hours of operation.
- Prohibition of construction worker or equipment parking on adjacent streets.
- Temporary pedestrian, bicycle, and vehicular traffic controls during all construction activities adjacent to Cosmo Street and Hollywood Boulevard to ensure traffic safety on public ROWs These controls shall include, but are not limited to, flag people trained in pedestrian safety.
- 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 shall be implemented as appropriate.

Chapter 5

Summary and Conclusions

This study was undertaken to analyze the potential transportation impacts of the mixed-use development Project at 6360 Hollywood Boulevard on the local street system. The following summarizes the results of this analysis:

- The Project is anticipated to be complete in Year 2022.
- The Project would not result in any significant CEQA impacts, as it is consistent with the City's plans, programs, ordinances, and policies, would not exceed the APC thresholds for VMT, and would not cause any geometric design hazards.
- After application of appropriate trip reduction credits, the Project is estimated to generate 94 morning peak hour trips and 104 afternoon peak hour trips.
- The Project provides adequate internal circulation to accommodate vehicular, pedestrian, and bicycle traffic without impeding through traffic movements on City streets.
- The Project will incorporate pedestrian and bicycle-friendly designs, such as a bicycle parking and adequate sidewalks.
- All construction worker and haul truck traffic would occur outside of the commuter morning and afternoon peak hours and would not result in temporary impacts. A Construction Management Plan would be implemented to ensure safety vehicles, pedestrians, and bicyclists.

References

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

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The 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy, Southern California Association of Governments, April 2016.

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CEQA Air Quality Handbook, South Coast Air Quality Management District, 1993.

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Hollywood Community Plan Update Draft Environmental Impact Report, Terry A. Hayes Associates, Inc., November 2018.

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Mobility Hubs: A Reader's Guide (Draft), Los Angeles Department of City Planning and City Planning Commission, Summer 2016.

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

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

Redevelopment Plan for the Hollywood Redevelopment Project (The Community Redevelopment Agency of the City of Los Angeles, May 2003)

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

Transportation Assessment Guidelines, Los Angeles Department of Transportation, July 2019.

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Appendix A

Memorandum of Understanding

LADOT

Transportation Assessment Memorandum of Understanding (MOU)

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

I. PROJECT INFORMATION

Project Name: 6360 Hollywood Boulevard

Project Address: 6360 Hollywood Boulevard

Project Description: The Project proposes an adaptive reuse of the existing building for the development of a 90 room hotel with 11,000 sf of restaurant space.

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

II. TRIP GENERATION Hotel / Restaurant Distribution

Geographic Distribution: N 35/10 % S 25/15 % E 15/35 % W 25/40 %

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

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	■	☐

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

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

	IN	OUT	TOTAL
AM Trips	54	40	94
PM Trips	60	44	104

III. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2022 Ambient or CMP Growth Rate: 1 % Per Yr.

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

Map of Study Intersections/Segments attached? *(May be subject to LADOT revision after access, safety and circulation analysis)* ■ Yes ☐ No

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

IV. ACCESS ASSESSMENT

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

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

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

V. CONTACT INFORMATION

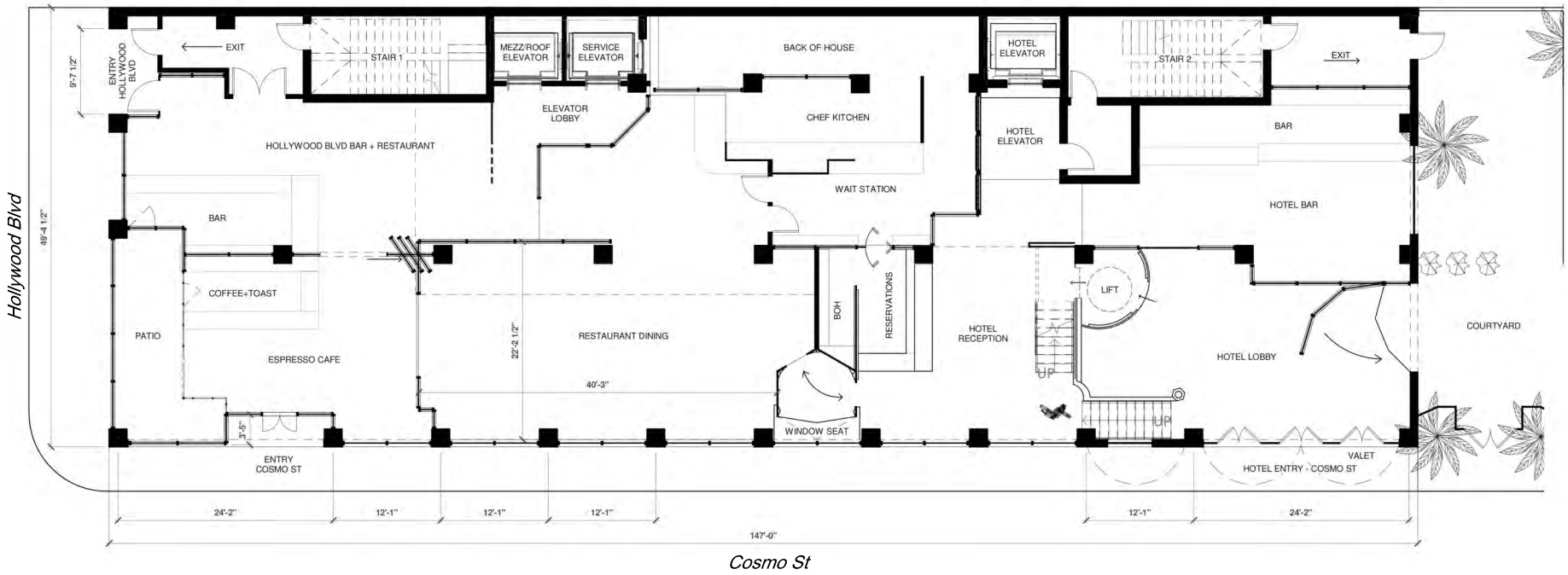
	CONSULTANT	DEVELOPER
Name:	Gibson Transportation Consulting, Inc.	Artist Guild Hospitality
Address:	555 W. 5th Street, Suite 3375, Los Angeles, CA 90013	1315 N. El Camino Real
Phone Number:	(213) 683-0088	310-806-7409
E-Mail:	ewong@gibsontrans.com	jf@artistguildhotels.com

Approved by:	x	10/14/19	x	11/7/19
	Consultant's Representative	Date	LADOT Representative	Date

STUDY INTERSECTIONS

1. Cosmo Street & Hollywood Boulevard
2. Ivar Avenue & Hollywood Boulevard
3. Cahuenga Boulevard & Selma Avenue
4. Cosmo Street & Selma Avenue
5. Ivar Avenue & Selma Avenue

LADOT Proj. Case No: _____

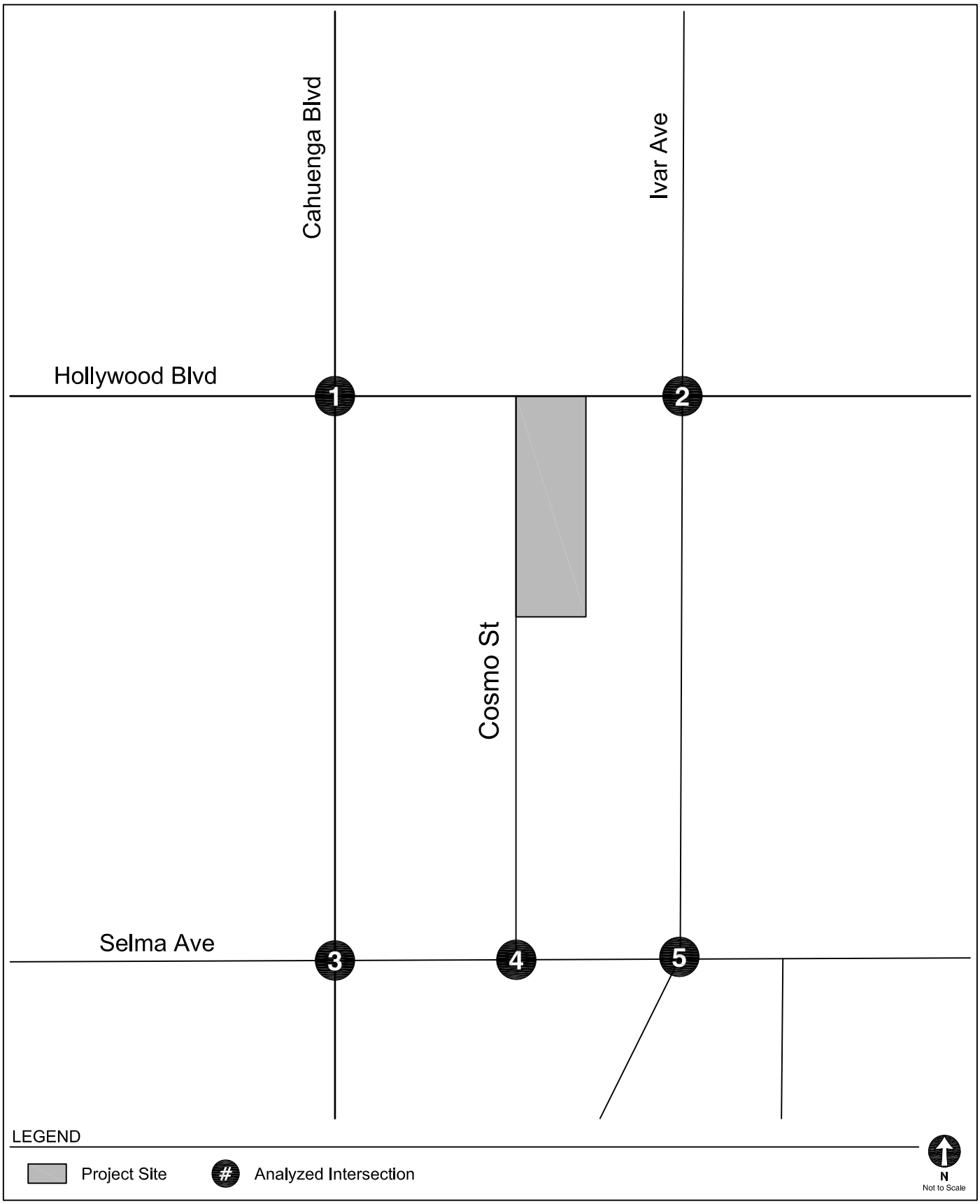


Source: Shiodzuke Design Company. September, 2019.

N
Not to Scale

PROJECT SITE PLAN

FIGURE 1



STUDY AREA & ANALYZED INTERSECTIONS

FIGURE 2

TABLE 1
STUDY INTERSECTIONS

No	Intersection	Jurisdiction
1.	Cosmo Street & Hollywood Boulevard	City of Los Angeles
2.	Ivar Avenue & Hollywood Bouelvard	City of Los Angeles
3.	Cahuenga Boulevard & Selma Avenue	City of Los Angeles
4.	Cosmo Street & Selma Avenue	City of Los Angeles
5.	Ivar Avenue & Selma Avenue	City of Los Angeles

TABLE 2
6360 HOLLYWOOD BOULEVARD MIXED-USE PROJECT
TRIP GENERATION ESTIMATES

Land Use	Size	Daily	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation Rates [a]								
Hotel (ITE 310)	per room	8.36	59%	41%	0.47	51%	49%	0.60
High-Turnover Restaurant (ITE 932)	per 1,000 sf	112.18	55%	45%	9.94	62%	38%	9.77
Proposed Project								
Hotel	90 rooms	752	25	17	42	28	26	54
Less 15% Transit/Walk Adjustment [b]		*(113)*	*(4)*	*(3)*	*(7)*	*(4)*	*(4)*	*(8)*
Subtotal - Hotel		**639**	**21**	**14**	**35**	**24**	**22**	**46**
Restaurant [c]	11,000 sf	1,234	60	49	109	66	41	107
Less 20% Internal Capture Adjustment [d]		*(247)*	*(12)*	*(10)*	*(22)*	*(13)*	*(8)*	*(21)*
Less 15% Transit/Walk Adjustment [b]		*(148)*	*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Less 20% Pass-By Adjustment [e]		*(168)*	*(8)*	*(7)*	*(15)*	*(9)*	*(6)*	*(15)*
Subtotal - Restaurant		**671**	**33**	**26**	**59**	**36**	**22**	**58**
Total - Net New Project Trips		**1,310**	**54**	**40**	**94**	**60**	**44**	**104**

Notes

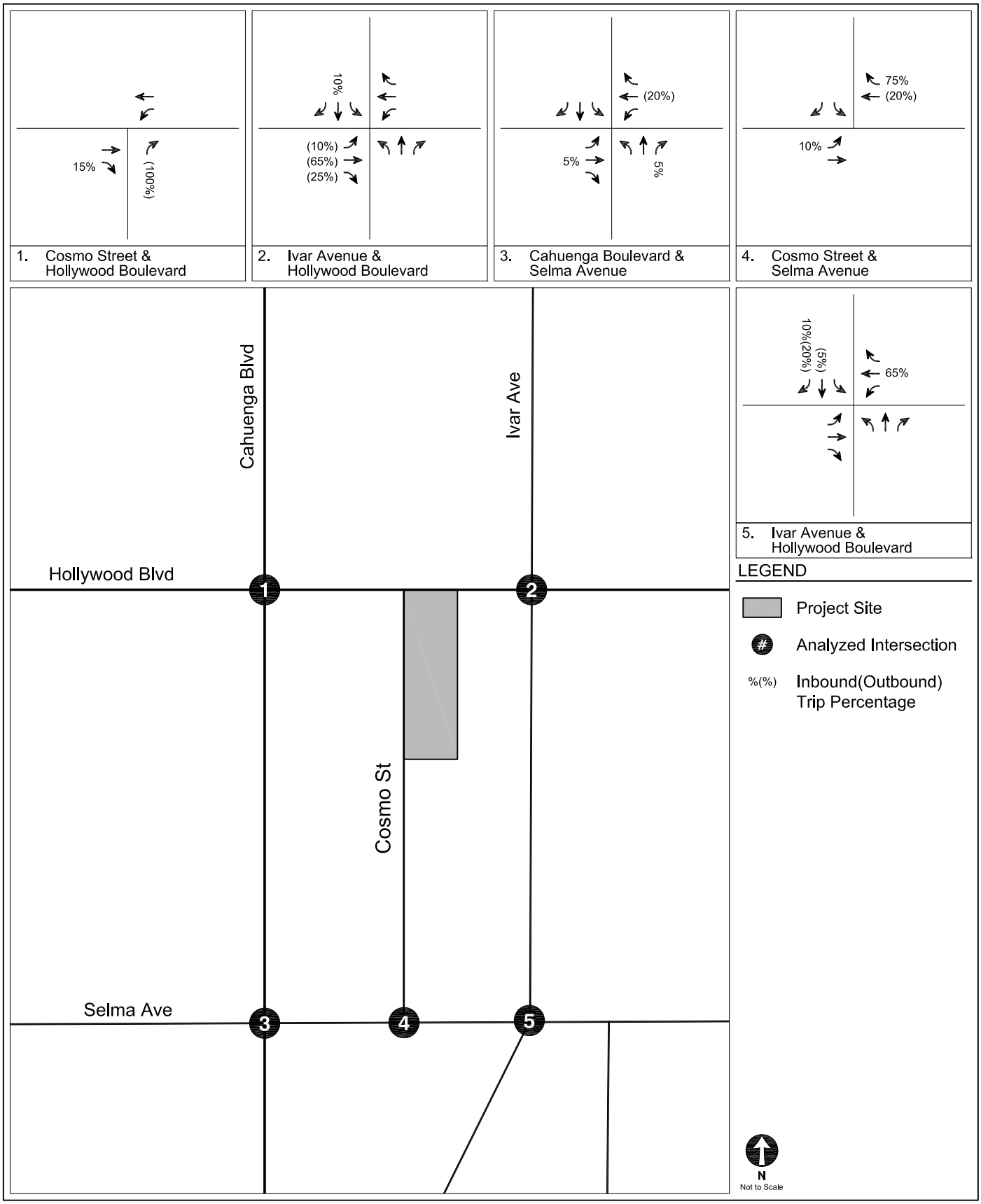
[a] Source: *Trip Generation, 10th Edition,* Institute of Transportation Engineers, 2017.

[b] Per LADOT's *Transportation Assessment Guidelines* (LADOT, 2019), the Project Site is located within a 0.25 miles walking distance from a transit station (Metro Red Line Hollywood Vine Station) and a RapidBus stop (Metro 780), therefore a 15% transit adjustment was applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments, and for arrivals via taxi, tour bus, and carpool services.

[c] Hotel trip rates includes ancillary conference/meeting rooms, a lobby lounge and bar, rooftop bar and lounge, guest amenities, as well as retail and restaurant space. However, the restaurant/lounge area within the hotel is open to the public and was therefore analyzed separately.

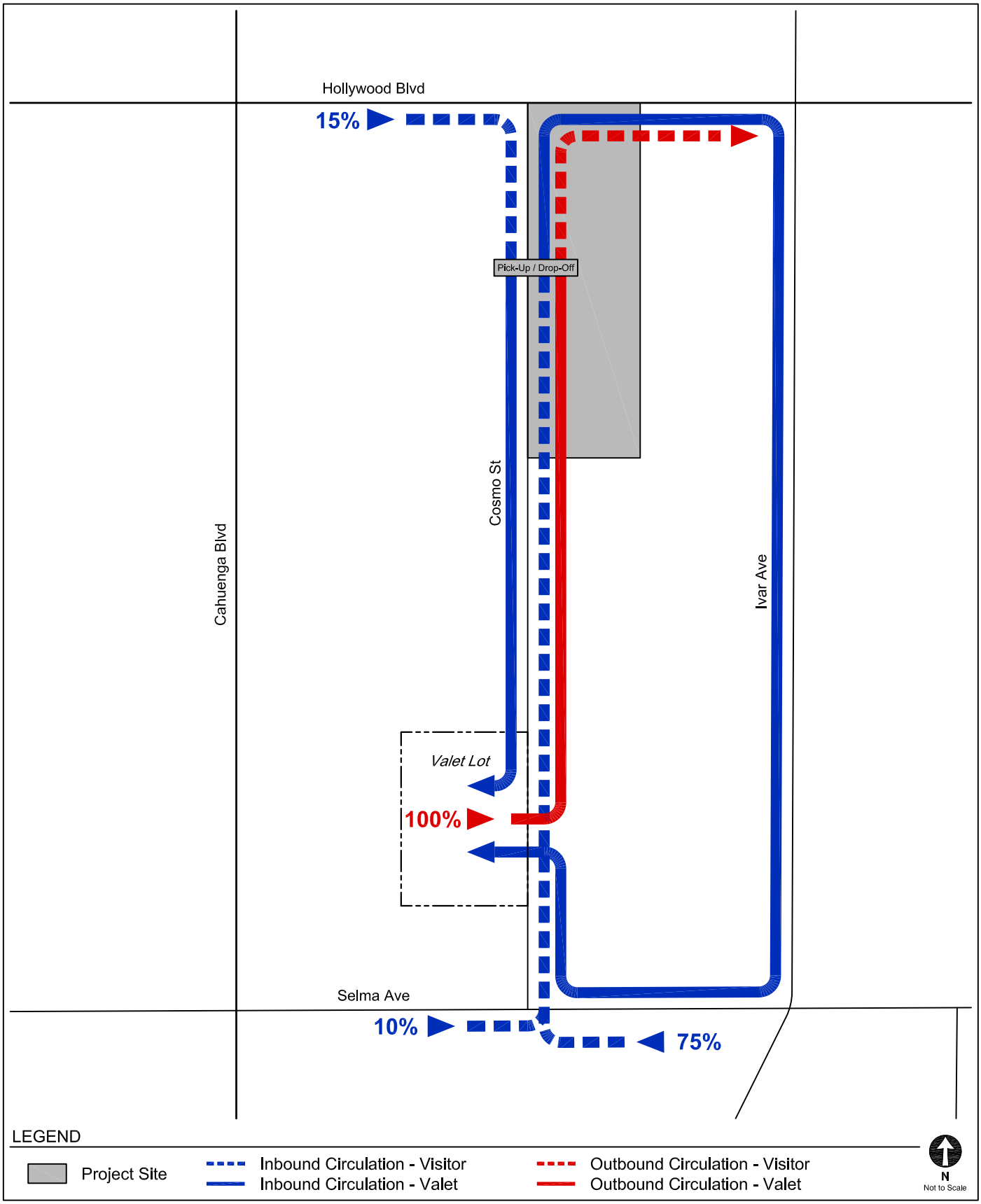
[d] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development (e.g., hotel guests visiting the restaurant use).

[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.



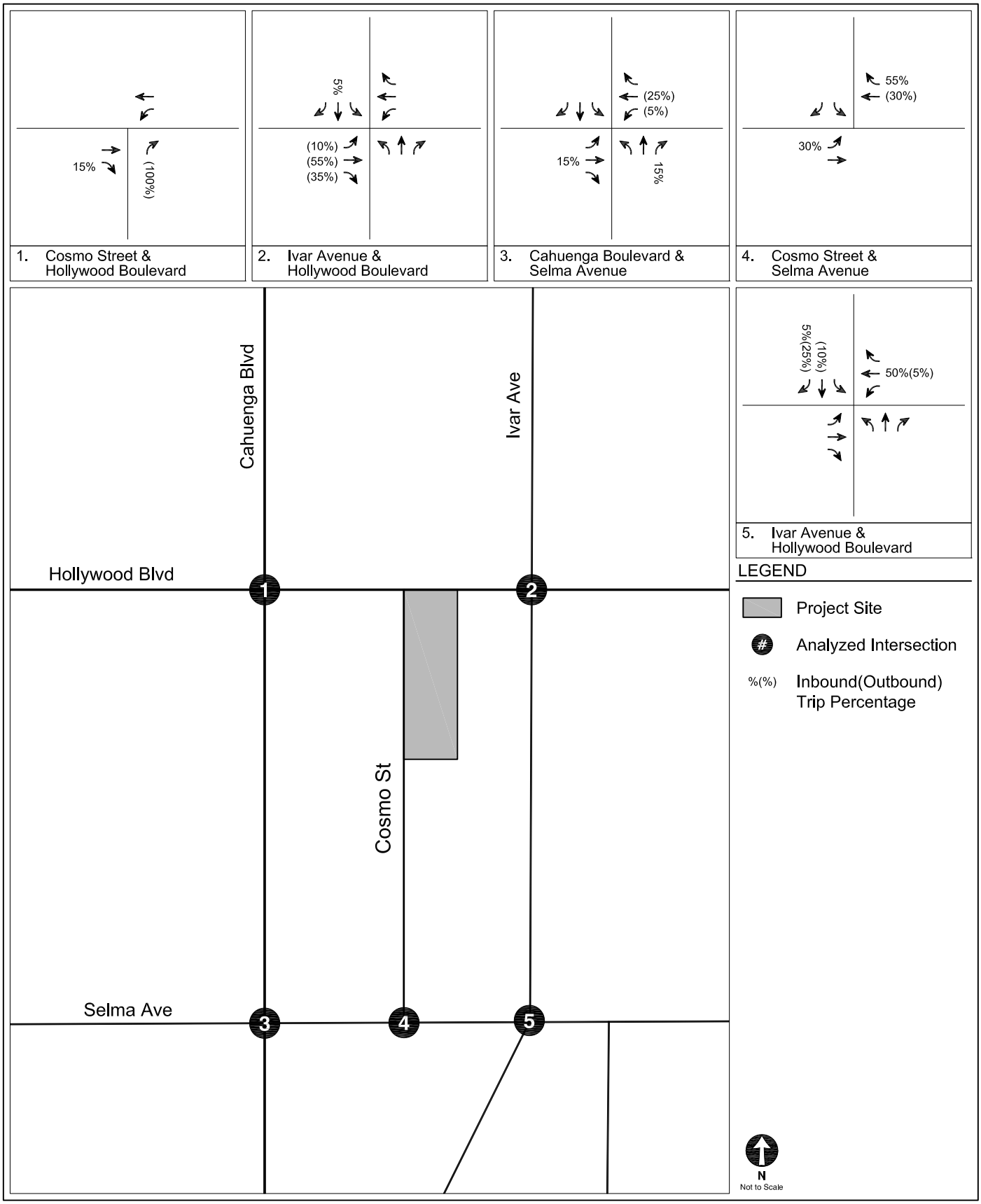
PROJECT TRIP DISTRIBUTION
HOTEL

FIGURE
3A



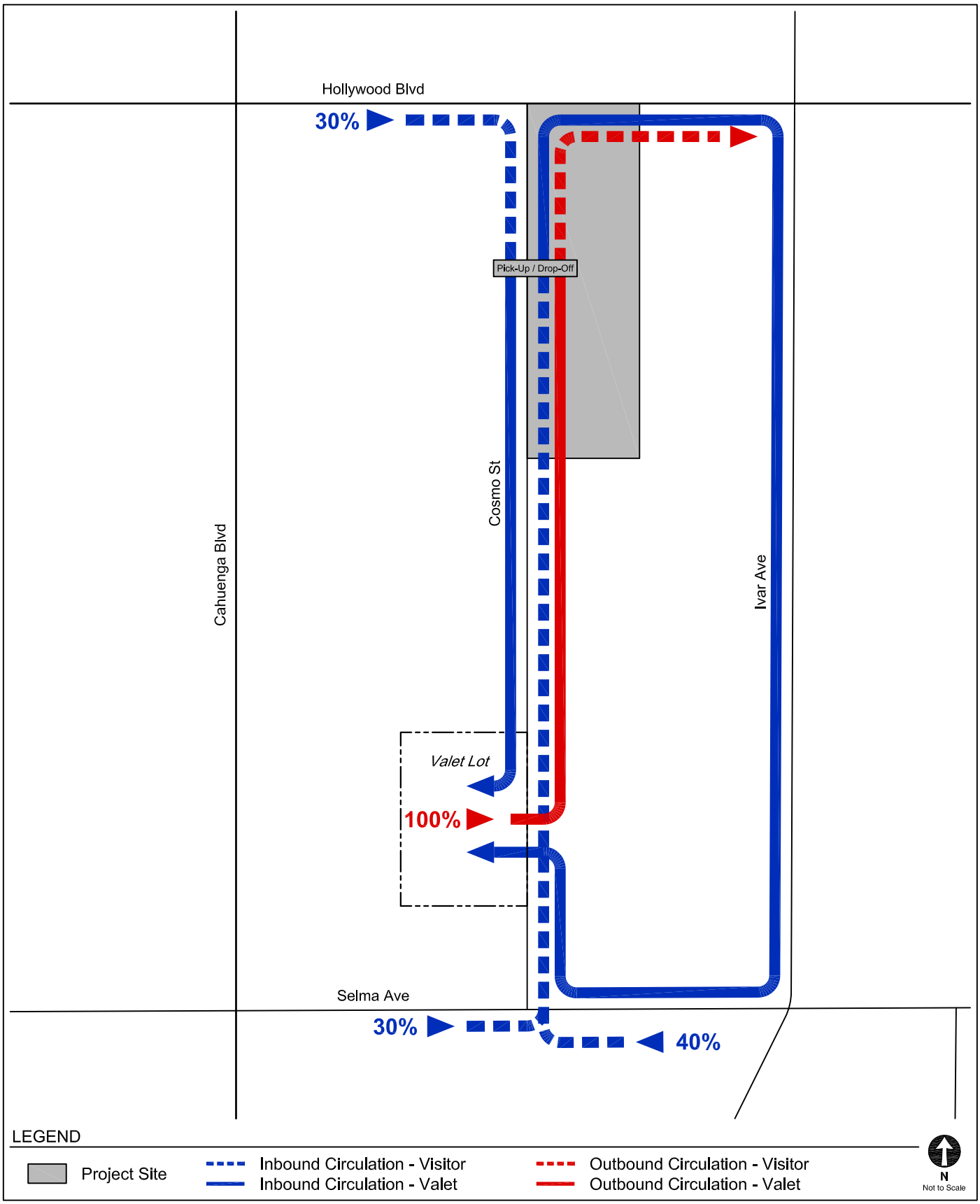
VALET OPERATIONS
HOTEL

FIGURE
3B



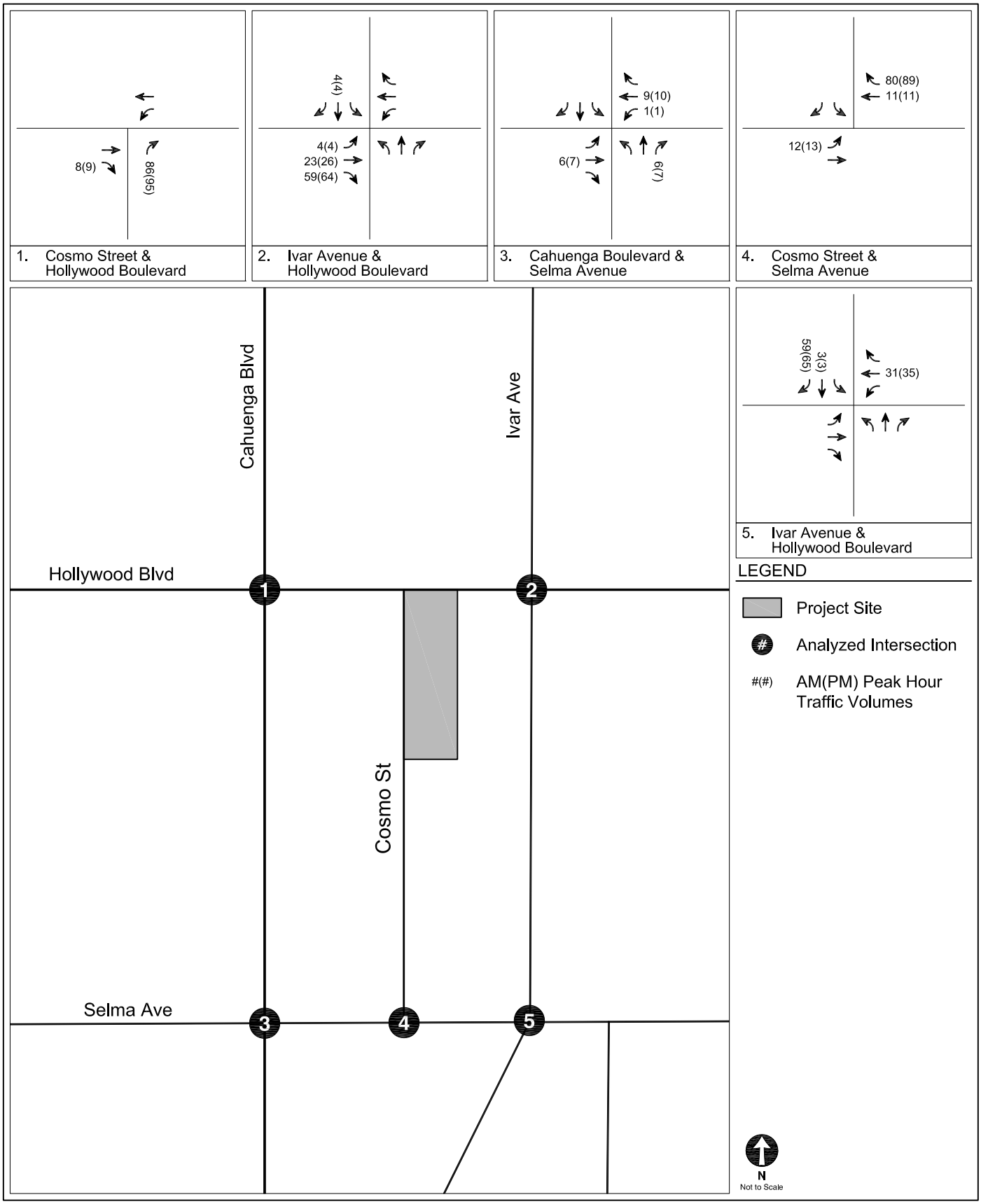
PROJECT TRIP DISTRIBUTION
RESTAURANT

FIGURE
4A



VALET OPERATIONS
RESTAURANT

FIGURE
4B



PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
5

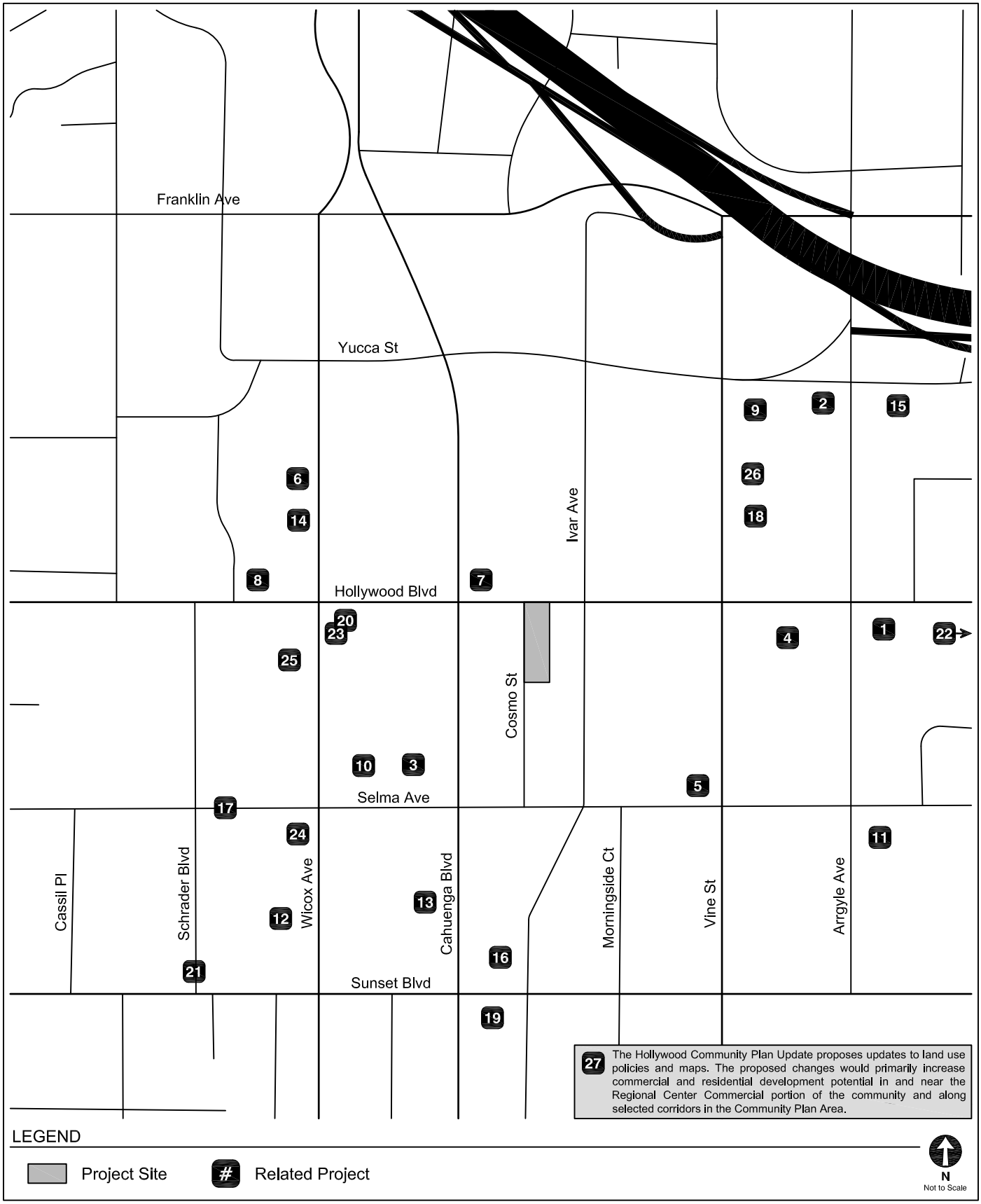
TABLE 3
RELATED PROJECTS

ID	Name	Address	Description	Trip Generation [a]						
				Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
					In	Out	Total	In	Out	Total
1 [b]	BLVD 6200 Mixed-Use	6200 W Hollywood Blvd	28 JLWQ Units, 1,014 apartment units and 175,000 sf retail (Phase 1 Complete)	2,816	41	103	143	133	109	242
2	Yucca Street Condos	6230 W Yucca St	114 apartment units and 2,697 sf commercial	473	5	27	32	26	12	38
3	Selma Hotel	6417 W Selma Ave	180 hotel rooms and 12,840 sf restaurant	1,849	6	4	10	61	59	120
4	Pantages Theater Office	6225 W Hollywood Blvd	210,000 sf office	1,918	243	33	276	43	411	254
5 [b]	Selma & Vine Office Project	1601 N Vine St	100,386 sf office and 2,012 sf commercial	1,239	155	27	182	39	145	184
6	1723 N Wilcox Residential	1723 N Wilcox Ave	68 apartment units and 3,700 sf retail	537	16	28	44	29	18	47
7	Hotel & Restaurant Project	6381 W Hollywood Blvd	80 hotel rooms and 15,290 sf restaurant	1,020	-19	11	-8	62	4	66
8	Hudson Building	6523 W Hollywood Blvd	10,402 sf restaurant, 4,074 sf of office and 890 sf of storage	547	-16	-11	-27	32	4	36
9	Millennium Hollywood Mixed-Use Project	1740 N Vine St	492 apartment units, 200 hotel rooms, 100,000 sf office, 35,000 sf fitness club, 15,000 sf retail and 34,000 sf restaurant	9,922	321	253	574	486	438	924
10	Selma - Wilcox Hotel	6421 W Selma Ave	114 hotel rooms and 1,993 sf restaurant	1,227	43	27	70	56	44	100
11	Modera Argyle	1546 N Argyle Ave	276 apartment units, 9,000 sf retail and 15,000 sf restaurant	2,013	43	127	170	128	51	179
12	Sunset + Wilcox	1541 N Wilcox Ave	200 hotel rooms and 9,000 sf restaurant	3,359	103	80	183	147	114	261
13	Cahuenga Boulevard Hotel	1525 N Cahuenga Blvd	64 hotel rooms, 700 sf rooftop restaurant/lounge and 3,300 sf restaurant	469	13	9	22	17	17	34
14	Wilcox Hotel	1717 N Wilcox Ave	133 hotel rooms and 3,580 sf retail	1,244	54	35	89	49	43	92
15	Mixed-Use	6220 W Yucca St	210 hotel rooms, 136 apartment units, 3,450 sf retail and 9,120 sf restaurant	2,652	88	111	199	130	85	215
16	Ivar Gardens Hotel	6409 W Sunset Blvd	275 hotel rooms and 1,900 sf retail	1,285	51	26	77	53	60	113
17	Selma Hotel	6516 W Selma Ave	212 rooms, 3,855 sf bar/lounge and 8,500 sf rooftop bar/event space	2,241	71	50	121	105	84	189
18	citizenM Hotel	1718 Vine St	216 hotel rooms and 4,354 sf restaurant	1,101	58	41	99	35	42	77
19	6400 Sunset Mixed-Use	6400 Sunset Blvd	200 apartment units and 7,000 sf restaurant	11	14	77	91	57	-6	51
20	Hollywood & Wilcox	6430-6440 W Hollywood Blvd	260 apartment units, 3,580 sf office, 11,020 sf retail and 3,200 sf restaurant	1,625	23	98	121	99	44	143
21	1600 Schrader	1600 Schrader Blvd	168-room hotel and 5,979 sf restaurant	1,666	58	40	98	80	63	143
22	Select @ Los Feliz (Mixed-Use)	4850 W Hollywood Blvd	101 apartment units and 10,000 sf restaurant	1,108	41	68	109	61	32	93
23	Mixed-Use	6436 W Hollywood Ave	220 apartment units and 8,800 sf retail	1,486	22	78	100	85	52	137
24	Citizen News	1545 Wilcox Ave	16,100 sf flexible event space, 14,800 sf restaurant	2,341	36	50	86	128	47	175
25	1637 N Wilcox MU	1637 Wilcox Ave	93 apartments, 61 affordable; 6,586 sf commercial	831	20	44	64	40	27	67
26	Hollywood Center MU (Formerly Millennium)	1720 N Vine St	1005 Units (872 apartments, 133 affordable senior), 30,176 sf retail	6,346	171	290	461	368	264	632
27	Hollywood Community Plan Update	The Hollywood Community Plan Update proposes updates to land use policies and maps. The proposed changes would primarily increase commercial and residential development potential in and near the Regional Center Commercial portion of the community and along selected corridors in the Community Plan Area. The decreases in development potential would be primarily focused on low- to medium-scale multi-family residential neighborhoods to conserve existing density and intensity of those neighborhoods. The projected population gro has been captured in the conservative ambient growth rate and the Related Projects defined above. The Project Study Area is fully contained within the Community Plan Area.								

Notes

[a] Source: Related project information based on available information provided by LADOT and Department of City Planning on September 17, 2019, and recent studies in the area.

[b] Although construction of the related project may be partially complete/entirely complete, the project was not fully occupied at the time traffic counts were conducted. Therefore, the related project was considered and listed to provide a more conservative analysis.



LOCATIONS OF RELATED PROJECTS

FIGURE 5

Appendix B

Traffic Volume Data

Turning Movement Count Report AM

Location ID: 1
North/South: Cosmo Street
East/West: Hollywood Blvd

Date: 10/24/19
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	
7:00	0	0	0	0	113	4	0	0	0	0	63	0	180
7:15	0	0	0	0	141	1	0	0	0	2	67	0	211
7:30	0	0	0	0	191	0	0	0	0	0	85	0	276
7:45	0	0	0	0	194	2	2	0	0	1	111	0	310
8:00	0	0	0	0	146	3	0	0	0	3	128	0	280
8:15	0	0	0	0	165	3	3	0	0	1	113	0	285
8:30	0	0	0	0	149	6	0	0	0	3	96	0	254
8:45	0	0	0	0	144	7	0	0	0	2	97	0	250
9:00	0	0	0	0	107	7	2	0	0	2	91	0	209
9:15	0	0	0	0	152	4	2	0	0	2	94	0	254
9:30	0	0	0	0	143	5	0	0	0	2	87	0	237
9:45	0	0	0	0	130	2	1	0	0	2	95	0	230

Total Volume:	0	0	0	0	1775	44	10	0	0	20	1127	0	2976
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	0%	98%	2%	100%	0%	0%	2%	98%	0%	

Peak Hr Begin:	7:30												
PHV	0	0	0	0	696	8	5	0	0	5	437	0	1151
PHF	#DIV/0!			0.898			0.417			0.844			0.928

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

Turning Movement Count Report PM

Location ID: 1
North/South: Cosmo Street
East/West: Hollywood Blvd

Date: 10/24/19
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	175	4	3	0	0	3	152	0	337
15:15	0	0	0	0	159	5	0	0	0	4	129	0	297
15:30	0	0	0	0	151	2	3	0	1	3	125	0	285
15:45	0	0	0	0	177	2	3	0	1	1	103	0	287
16:00	0	0	0	0	139	2	8	0	1	1	123	0	274
16:15	0	0	0	0	151	0	6	0	1	1	147	0	306
16:30	0	0	0	0	129	4	6	0	0	2	100	0	241
16:45	0	0	0	0	141	8	8	0	1	1	104	2	265
17:00	0	0	0	0	126	3	5	0	0	3	131	0	268
17:15	0	0	0	0	124	3	4	0	1	2	127	0	261
17:30	0	0	0	0	148	0	2	0	0	2	111	0	263
17:45	0	0	0	0	151	5	4	0	1	0	138	1	300
Total Volume:	0	0	0	0	1771	38	52	0	7	23	1490	3	3384
Approach %	#DIV/0!	#DIV/0!	#DIV/0!	0%	98%	2%	88%	0%	12%	2%	98%	0%	
Peak Hr Begin:	15:00												
PHV	0	0	0	0	662	13	9	0	2	11	509	0	1206
PHF	#DIV/0!			0.943			0.688			0.839			0.895

Pedestrian/Bicycle Count Report

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	10	0	0	0
7:15	0	0	0	0	27	0	0	0
7:30	0	0	0	0	21	0	0	0
7:45	0	0	0	0	35	0	0	0
8:00	0	0	1	0	23	0	0	0
8:15	0	0	0	0	39	0	0	0
8:30	0	0	0	0	56	1	1	0
8:45	0	0	1	0	45	0	0	0
9:00	0	0	0	0	48	1	0	0
9:15	0	0	0	0	34	1	0	0
9:30	0	0	0	0	44	1	0	0
9:45	0	0	0	0	69	2	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
15:00	0	0	0	0	135	0	0	0
15:15	0	0	0	0	138	0	0	0
15:30	0	0	0	0	161	1	0	0
15:45	0	0	0	0	123	0	0	0
16:00	0	0	0	1	150	2	0	0
16:15	0	0	0	0	133	5	0	0
16:30	0	0	0	0	139	4	0	0
16:45	0	0	0	0	140	0	0	0
17:00	0	0	0	0	155	0	0	0
17:15	0	0	0	0	125	2	0	0
17:30	0	0	1	0	165	0	0	0
17:45	0	0	0	0	151	3	0	0

Turning Movement Count Report AM

Location ID: 2
North/South: Ivar Avenue
East/West: Hollywood Blvd

Date: 10/24/19
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	
7:00	11	12	2	3	106	5	2	2	1	3	62	0	209
7:15	15	29	3	3	132	4	2	2	1	3	64	2	260
7:30	12	32	0	5	175	6	3	5	2	0	79	2	321
7:45	17	52	1	11	169	10	6	4	1	6	108	4	389
8:00	9	94	2	7	143	20	5	7	0	4	119	3	413
8:15	12	63	3	3	153	16	12	11	1	9	114	2	399
8:30	10	43	0	9	147	14	11	8	1	1	89	2	335
8:45	13	55	2	4	133	20	6	8	0	4	84	7	336
9:00	12	71	2	11	111	16	4	21	1	6	91	4	350
9:15	12	58	1	8	132	11	12	19	1	4	78	3	339
9:30	8	43	3	4	137	17	6	15	1	2	89	7	332
9:45	14	52	3	10	116	13	9	11	3	5	88	4	328

Total Volume:	145	604	22	78	1654	152	78	113	13	47	1065	40	4011
Approach %	19%	78%	3%	4%	88%	8%	38%	55%	6%	4%	92%	3%	

Peak Hr Begin:	7:45												
PHV	48	252	6	30	612	60	34	30	3	20	430	11	1536
PHF	0.729			0.924			0.698			0.915			0.930

Turning Movement Count Report PM

Location ID: 2
North/South: Ivar Avenue
East/West: Hollywood Blvd

Date: 10/24/19
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	4	14	5	4	158	5	16	29	8	7	132	11	393
15:15	1	10	2	8	158	10	20	22	11	11	114	8	375
15:30	1	9	5	5	142	5	18	39	12	14	106	9	365
15:45	5	13	5	1	122	5	22	39	13	8	99	11	343
16:00	3	21	0	2	135	8	13	38	24	2	114	6	366
16:15	5	20	4	9	132	11	18	35	11	2	135	9	391
16:30	4	28	2	4	125	3	23	37	10	7	101	7	351
16:45	3	21	4	8	132	8	25	30	10	9	103	4	357
17:00	2	11	3	7	122	9	36	41	8	7	113	13	372
17:15	6	14	3	10	112	6	35	42	12	5	115	15	375
17:30	4	17	3	8	105	3	27	50	22	9	104	15	367
17:45	1	8	3	8	114	8	33	52	25	13	105	11	381
Total Volume:	39	186	39	74	1557	81	286	454	166	94	1341	119	4436
Approach %	15%	70%	15%	4%	91%	5%	32%	50%	18%	6%	86%	8%	
Peak Hr Begin:	17:00												
PHV	13	50	12	33	453	26	131	185	67	34	437	54	1495
PHF	0.781			0.928			0.870			0.972			0.981

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	5	0	2	0	22	0	0	0
7:15	8	1	5	0	25	0	1	0
7:30	15	0	3	0	18	0	0	0
7:45	14	1	9	0	24	0	2	0
8:00	14	0	10	0	40	0	4	0
8:15	28	0	8	0	43	1	0	0
8:30	38	0	13	0	74	1	3	0
8:45	48	1	20	0	47	0	11	1
9:00	37	0	8	0	52	2	5	0
9:15	36	0	18	0	63	1	3	0
9:30	94	1	15	0	64	0	1	0
9:45	42	0	6	0	58	0	16	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	66	4	21	0	138	1	14	1
15:15	58	1	11	0	170	1	5	0
15:30	65	2	5	1	144	1	8	0
15:45	67	1	13	0	202	2	8	0
16:00	65	1	22	0	150	0	24	0
16:15	53	1	22	0	192	0	15	0
16:30	64	2	14	0	201	1	10	0
16:45	53	1	8	0	162	2	5	1
17:00	67	0	12	0	189	3	10	0
17:15	69	2	11	2	135	2	4	1
17:30	60	0	8	2	146	2	3	1
17:45	116	1	7	0	209	3	6	0

Turning Movement Count Report AM

Location ID: 3
North/South: Cahuenga Blvd
East/West: Selma Avenue

Date: 10/24/19
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	
7:00	7	249	2	1	4	1	1	78	1	1	2	2	349
7:15	4	286	2	0	7	3	2	93	1	3	1	1	403
7:30	8	291	3	3	4	2	3	106	4	7	6	3	440
7:45	14	261	2	0	12	1	2	134	8	7	10	5	456
8:00	11	228	8	6	13	5	8	153	2	6	20	1	461
8:15	14	260	5	5	14	4	3	198	4	4	23	9	543
8:30	6	231	1	5	7	0	4	271	2	5	12	6	550
8:45	8	224	2	1	16	5	7	203	3	4	14	3	490
9:00	11	254	10	15	11	3	13	167	5	7	8	7	511
9:15	9	215	8	11	16	1	12	86	9	6	9	5	387
9:30	13	169	15	9	14	0	14	128	5	9	7	9	392
9:45	18	228	10	8	20	2	2	150	3	4	9	7	461

Total Volume:	123	2896	68	64	138	27	71	1767	47	63	121	58	5443
Approach %	4%	94%	2%	28%	60%	12%	4%	94%	2%	26%	50%	24%	

Peak Hr Begin:	8:15												
PHV	39	969	18	26	48	12	27	839	14	20	57	25	2094
PHF	0.919			0.741			0.794			0.708			0.952

Turning Movement Count Report PM

Location ID: 3
North/South: Cahuenga Blvd
East/West: Selma Avenue

Date: 10/24/19
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	9	153	2	17	21	6	13	240	8	7	30	17	523
15:15	8	152	6	16	16	6	10	236	14	11	31	15	521
15:30	14	128	8	9	26	11	14	245	6	9	25	20	515
15:45	11	162	8	20	20	7	9	257	6	7	30	10	547
16:00	10	130	2	22	15	7	16	194	0	10	32	13	451
16:15	12	128	4	16	21	2	11	176	3	8	24	7	412
16:30	9	153	5	19	28	7	12	177	6	9	28	16	469
16:45	15	171	1	11	16	8	10	266	4	8	22	12	544
17:00	18	162	3	17	16	4	13	231	0	7	38	11	520
17:15	12	154	1	11	22	7	8	213	2	8	28	10	476
17:30	9	172	1	18	23	11	6	270	0	10	27	21	568
17:45	24	168	3	10	22	10	5	190	1	6	33	12	484
Total Volume:	151	1833	44	186	246	86	127	2695	50	100	348	164	6030
Approach %	7%	90%	2%	36%	47%	17%	4%	94%	2%	16%	57%	27%	
Peak Hr Begin:	16:45												
PHV	54	659	6	57	77	30	37	980	6	33	115	54	2108
PHF	0.961			0.788			0.913			0.871			0.928

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	3	0	8	0	6	0	5	0
7:15	7	0	4	0	3	0	6	0
7:30	6	0	7	0	7	0	8	0
7:45	14	0	5	0	7	0	5	0
8:00	26	0	6	0	4	0	9	0
8:15	11	0	12	0	16	0	11	0
8:30	32	0	7	0	15	0	12	0
8:45	22	1	15	0	27	0	16	2
9:00	19	2	12	0	15	0	11	0
9:15	21	0	13	0	20	0	15	0
9:30	20	0	13	0	19	0	9	0
9:45	34	0	15	0	27	0	18	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	48	4	28	0	35	0	26	0
15:15	30	1	36	0	34	1	25	0
15:30	34	0	27	1	27	1	24	0
15:45	36	0	24	1	31	0	19	0
16:00	39	0	50	0	33	0	26	1
16:15	31	0	26	0	20	1	29	0
16:30	34	2	27	0	30	0	21	0
16:45	43	0	46	1	47	0	23	0
17:00	29	1	29	1	37	2	34	0
17:15	33	2	31	1	21	1	23	1
17:30	42	0	45	0	21	1	29	0
17:45	39	1	35	0	27	3	34	1

Turning Movement Count Report AM

Location ID: 4
North/South: Cosmo Street
East/West: Selma Avenue

Date: 10/24/19
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	
7:00	1	0	2	0	9	0	0	0	0	0	3	1	16
7:15	2	0	1	0	6	0	0	0	0	0	6	1	16
7:30	0	0	4	0	9	0	0	0	0	0	7	1	21
7:45	0	0	1	3	9	0	0	0	0	0	16	0	29
8:00	4	0	0	3	18	0	0	0	0	0	21	0	46
8:15	1	0	1	2	22	0	0	0	0	0	38	2	66
8:30	3	0	2	2	14	0	0	0	0	0	16	0	37
8:45	3	0	3	1	16	0	0	0	0	0	16	4	43
9:00	7	0	1	6	17	0	0	0	0	0	20	2	53
9:15	2	0	2	2	25	0	0	0	0	0	24	6	61
9:30	3	0	2	3	35	0	0	0	0	0	47	0	90
9:45	2	0	2	2	20	0	0	0	0	0	19	2	47

Total Volume:	28	0	21	24	200	0	0	0	0	0	233	19	525
Approach %	57%	0%	43%	11%	89%	0%	0%	0%	0%	0%	92%	8%	

Peak Hr Begin:	9:00												
PHV	14	0	7	13	97	0	0	0	0	0	110	10	251
PHF	0.656			0.724			#DIV/0!			0.638			0.697

Turning Movement Count Report PM

Location ID: 4
North/South: Cosmo Street
East/West: Selma Avenue

Date: 10/24/19
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	2	0	2	0	43	0	0	0	0	0	49	3	99
15:15	3	0	3	4	34	0	0	0	0	0	41	5	90
15:30	6	0	6	0	40	0	0	0	0	0	45	3	100
15:45	6	0	8	2	38	0	0	0	0	0	41	3	98
16:00	6	0	3	5	40	0	0	0	0	0	40	11	105
16:15	7	0	1	4	36	0	0	0	0	0	37	5	90
16:30	1	0	1	2	32	0	0	0	0	0	45	4	85
16:45	7	0	2	4	36	0	0	0	0	0	36	7	92
17:00	6	0	4	6	25	0	0	0	0	0	44	3	88
17:15	6	0	7	8	32	0	0	0	0	0	43	2	98
17:30	4	0	0	1	41	0	0	0	0	0	34	2	82
17:45	6	0	2	2	41	0	0	0	0	0	38	3	92

Total Volume:	60	0	39	38	438	0	0	0	0	0	493	51	1119
Approach %	61%	0%	39%	8%	92%	0%	0%	0%	0%	0%	91%	9%	

Peak Hr Begin:	15:15												
PHV	21	0	20	11	152	0	0	0	0	0	167	22	393
PHF	0.732			0.906			0.000			0.926			0.936

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	3	0	1	0	0	0	0	0
7:15	6	0	2	0	0	0	0	0
7:30	6	0	0	0	0	0	0	0
7:45	15	1	0	0	0	0	0	0
8:00	5	0	0	0	0	0	0	0
8:15	22	0	0	0	0	0	3	0
8:30	21	0	0	0	0	0	3	0
8:45	25	0	0	0	0	0	1	0
9:00	17	1	1	0	0	0	5	0
9:15	19	0	7	0	0	0	1	0
9:30	7	1	0	0	0	0	2	0
9:45	27	0	0	0	0	0	0	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	34	0	0	0	0	0	0	0
15:15	30	0	0	0	0	0	1	0
15:30	28	0	0	0	0	0	2	0
15:45	30	0	1	0	0	0	2	0
16:00	43	1	2	0	0	0	4	0
16:15	33	0	1	0	0	0	0	0
16:30	23	0	3	0	0	0	1	0
16:45	32	0	0	0	0	0	0	0
17:00	33	0	1	0	0	0	2	0
17:15	23	0	0	0	0	0	3	0
17:30	36	0	0	0	0	0	1	0
17:45	34	0	0	0	0	0	1	0

Turning Movement Count Report AM

Location ID: 2
North/South: Ivar Avenue
East/West: Selma Avenue

Date: 10/24/19
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	
7:00	1	17	2	3	3	4	2	5	2	4	2	0	45
7:15	5	43	3	5	3	1	2	9	1	7	3	0	82
7:30	1	47	2	2	7	13	4	7	4	6	6	1	100
7:45	6	70	1	5	9	7	4	3	5	11	8	1	130
8:00	7	111	2	3	5	7	3	13	9	11	24	1	196
8:15	3	83	4	7	10	14	6	19	6	5	14	0	171
8:30	0	53	3	2	15	11	4	8	2	2	7	2	109
8:45	5	57	3	7	11	9	7	19	9	8	12	2	149
9:00	4	73	4	13	20	19	4	13	7	8	10	3	178
9:15	2	63	3	7	16	14	5	34	24	28	16	3	215
9:30	2	46	2	12	14	5	3	22	8	4	16	3	137
9:45	7	70	7	8	24	6	6	10	4	1	18	1	162

Total Volume:	43	733	36	74	137	110	50	162	81	95	136	17	1674
Approach %	5%	90%	4%	23%	43%	34%	17%	55%	28%	38%	55%	7%	

Peak Hr Begin:	9:00												
PHV	15	252	16	40	74	44	18	79	43	41	60	10	692
PHF	0.842			0.760			0.556			0.590			0.805

Turning Movement Count Report PM

Location ID: 2
North/South: Ivar Avenue
East/West: Selma Avenue

Date: 10/24/19
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	5	17	5	8	25	13	13	28	8	8	27	4	161
15:15	3	21	5	7	27	8	10	46	10	17	30	1	185
15:30	2	21	3	5	22	8	24	51	17	16	32	2	203
15:45	6	13	3	8	32	10	14	59	9	7	35	5	201
16:00	4	29	5	11	23	10	19	51	9	13	25	2	201
16:15	4	29	2	9	22	10	14	65	8	8	40	1	212
16:30	4	24	5	10	26	12	26	42	11	13	32	2	207
16:45	3	29	3	8	22	8	14	54	9	15	31	1	197
17:00	8	20	3	11	24	7	14	48	4	9	37	5	190
17:15	4	23	2	7	26	9	24	61	11	6	32	0	205
17:30	5	23	8	13	27	9	21	48	9	10	24	2	199
17:45	5	19	5	14	23	9	28	63	16	8	34	7	231
Total Volume:	53	268	49	111	299	113	221	616	121	130	379	32	2392
Approach %	14%	72%	13%	21%	57%	22%	23%	64%	13%	24%	70%	6%	
Peak Hr Begin:	17:00												
PHV	22	85	18	45	100	34	87	220	40	33	127	14	825
PHF	0.868			0.913			0.811			0.853			0.893

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	8	0	2	0	2	0	4	0
7:15	4	1	2	0	7	0	2	2
7:30	14	0	4	0	4	0	2	1
7:45	3	0	2	0	3	0	2	0
8:00	19	0	1	0	6	0	1	0
8:15	21	0	7	0	20	0	8	0
8:30	26	0	11	0	17	1	11	0
8:45	19	3	4	2	12	0	3	0
9:00	19	0	10	1	9	0	6	0
9:15	7	1	5	0	11	0	2	0
9:30	26	0	6	0	18	0	10	0
9:45	16	0	8	0	21	1	8	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	38	1	5	1	24	1	19	0
15:15	26	2	8	0	23	2	18	1
15:30	30	1	17	0	34	0	15	0
15:45	33	0	15	0	22	1	29	1
16:00	34	3	11	0	26	0	16	2
16:15	18	0	14	0	27	0	10	0
16:30	31	1	11	0	27	0	12	1
16:45	32	1	13	0	33	3	11	0
17:00	20	0	20	1	38	1	9	0
17:15	45	1	6	1	23	3	19	0
17:30	28	1	8	1	27	3	20	0
17:45	42	1	16	0	30	0	16	0

Appendix C

HCM Analysis Worksheets

Existing Conditions 2019
Morning Peak Hour

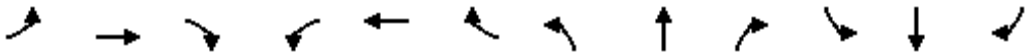
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	437	5	8	696	0	5
Future Vol, veh/h	437	5	8	696	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	475	5	9	757	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	480	0	799	240
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	321	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	1079	-	355	761
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1079	-	350	761
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	662	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	761	-	-	1079	-
HCM Lane V/C Ratio	0.007	-	-	0.008	-
HCM Control Delay (s)	9.8	-	-	8.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	430	20	60	612	30	3	30	34	6	252	48
Future Volume (veh/h)	11	430	20	60	612	30	3	30	34	6	252	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	467	22	65	665	33	3	33	37	7	274	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	526	2331	110	646	2325	115	46	182	191	44	333	62
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	748	3455	162	907	3446	171	18	826	868	13	1517	283
Grp Volume(v), veh/h	12	240	249	65	343	355	73	0	0	333	0	0
Grp Sat Flow(s),veh/h/ln	748	1777	1841	907	1777	1840	1712	0	0	1814	0	0
Q Serve(g_s), s	0.6	4.6	4.6	2.6	7.0	7.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	7.6	4.6	4.6	7.2	7.0	7.0	3.1	0.0	0.0	15.8	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.09	0.04		0.51	0.02		0.16
Lane Grp Cap(c), veh/h	526	1199	1242	646	1199	1241	418	0	0	439	0	0
V/C Ratio(X)	0.02	0.20	0.20	0.10	0.29	0.29	0.17	0.00	0.00	0.76	0.00	0.00
Avail Cap(c_a), veh/h	526	1199	1242	646	1199	1241	792	0	0	845	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.4	5.5	5.5	6.9	5.9	5.9	28.6	0.0	0.0	33.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.4	0.4	0.3	0.6	0.6	0.2	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.2	2.8	2.9	0.9	4.0	4.2	2.3	0.0	0.0	9.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	5.9	5.9	7.2	6.5	6.5	28.8	0.0	0.0	36.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	D	A	A
Approach Vol, veh/h		501			763			73			333	
Approach Delay, s/veh		5.9			6.6			28.8			36.2	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.2		24.8		65.2		24.8				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 41		40.0		* 41		40.0				
Max Q Clear Time (g_c+I1), s		9.2		5.1		9.6		17.8				
Green Ext Time (p_c), s		5.3		0.4		3.2		2.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.3									
HCM 6th LOS			B									

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	57	20	12	48	26	14	839	27	18	969	39
Future Volume (veh/h)	25	57	20	12	48	26	14	839	27	18	969	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	62	22	13	52	28	15	912	29	20	1053	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	94	30	58	94	46	58	2718	86	63	2689	106
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.81	0.81	0.81	1.00	1.00	1.00
Sat Flow, veh/h	314	1090	347	149	1088	533	21	3370	106	27	3333	132
Grp Volume(v), veh/h	111	0	0	93	0	0	496	0	460	579	0	536
Grp Sat Flow(s),veh/h/ln	1750	0	0	1770	0	0	1814	0	1683	1813	0	1678
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	0.0	4.5	0.0	0.0	6.3	0.0	6.5	0.0	0.0	0.0
Prop In Lane	0.24		0.20	0.14		0.30	0.03		0.06	0.03		0.08
Lane Grp Cap(c), veh/h	201	0	0	199	0	0	1505	0	1358	1504	0	1354
V/C Ratio(X)	0.55	0.00	0.00	0.47	0.00	0.00	0.33	0.00	0.34	0.39	0.00	0.40
Avail Cap(c_a), veh/h	477	0	0	481	0	0	1505	0	1358	1504	0	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	0.0	39.6	0.0	0.0	2.3	0.0	2.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.0	1.7	0.0	0.0	0.6	0.0	0.7	0.7	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	4.1	0.0	0.0	3.5	0.0	0.0	2.8	0.0	2.7	0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	0.0	41.3	0.0	0.0	2.9	0.0	3.0	0.7	0.0	0.9
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		111			93			956			1115	
Approach Delay, s/veh		42.3			41.3			2.9			0.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	77.1	12.9	77.1	12.9
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 58	22.9	* 58	22.9
Max Q Clear Time (g_c+I1), s	8.5	7.4	2.0	6.5
Green Ext Time (p_c), s	8.0	0.4	10.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Notes

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

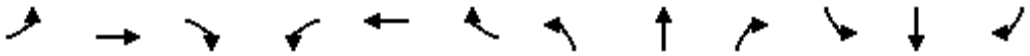
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	110	97	13	7	14
Future Vol, veh/h	10	110	97	13	7	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	120	105	14	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	119	0	-	0	254	112
Stage 1	-	-	-	-	112	-
Stage 2	-	-	-	-	142	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1469	-	-	-	735	941
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	885	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1469	-	-	-	729	941
Mov Cap-2 Maneuver	-	-	-	-	729	-
Stage 1	-	-	-	-	906	-
Stage 2	-	-	-	-	885	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1469	-	-	-	858
HCM Lane V/C Ratio	0.007	-	-	-	0.027
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	10	60	41	44	74	40	43	79	18	16	252	15
Future Volume (veh/h)	10	60	41	44	74	40	43	79	18	16	252	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	65	45	48	80	43	47	86	20	17	274	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	175	111	160	160	73	339	587	123	106	1036	58
Arrive On Green	0.06	0.06	0.06	0.17	0.17	0.17	0.61	0.61	0.61	0.81	0.81	0.81
Sat Flow, veh/h	73	1008	640	330	924	421	386	967	204	35	1706	96
Grp Volume(v), veh/h	121	0	0	171	0	0	153	0	0	307	0	0
Grp Sat Flow(s),veh/h/ln	1721	0	0	1675	0	0	1557	0	0	1837	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	4.0	0.0	0.0	1.6	0.0	0.0	1.8	0.0	0.0
Prop In Lane	0.09		0.37	0.28		0.25	0.31		0.13	0.06		0.05
Lane Grp Cap(c), veh/h	385	0	0	392	0	0	1049	0	0	1199	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.44	0.00	0.00	0.15	0.00	0.00	0.26	0.00	0.00
Avail Cap(c_a), veh/h	767	0	0	754	0	0	1049	0	0	1199	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.73	0.00	0.00
Uniform Delay (d), s/veh	19.0	0.0	0.0	17.0	0.0	0.0	3.8	0.0	0.0	1.9	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	2.1	0.0	0.0	2.7	0.0	0.0	0.8	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	0.0	17.8	0.0	0.0	4.1	0.0	0.0	2.3	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		121			171			153			307	
Approach Delay, s/veh		19.4			17.8			4.1			2.3	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.2		12.8		32.2		12.8				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		3.6		5.0		3.8		6.0				
Green Ext Time (p_c), s		0.7		0.5		1.5		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			8.9									
HCM 6th LOS			A									

Notes

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

Existing Conditions 2019
Afternoon Peak Hour

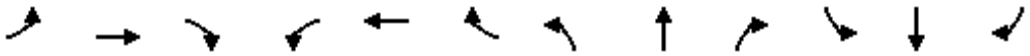
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	11	13	662	2	9
Future Vol, veh/h	509	11	13	662	2	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	553	12	14	720	2	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	565	0	875	283
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	316	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	1003	-	321	714
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1003	-	314	714
Mov Cap-2 Maneuver	-	-	-	-	314	-
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	580	-	-	1003	-
HCM Lane V/C Ratio	0.021	-	-	0.014	-
HCM Control Delay (s)	11.3	-	-	8.6	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	437	34	26	453	33	67	185	131	12	50	13
Future Volume (veh/h)	54	437	34	26	453	33	67	185	131	12	50	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	475	37	28	492	36	73	201	142	13	54	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	560	2055	160	570	2066	151	111	244	160	90	335	79
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.47	0.47	0.47	0.28	0.28	0.28
Sat Flow, veh/h	875	3341	259	888	3358	245	230	873	572	155	1200	283
Grp Volume(v), veh/h	59	252	260	28	260	268	416	0	0	81	0	0
Grp Sat Flow(s),veh/h/ln	875	1777	1824	888	1777	1826	1675	0	0	1638	0	0
Q Serve(g_s), s	2.9	5.7	5.8	1.3	5.9	6.0	15.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.9	5.7	5.8	7.1	5.9	6.0	20.3	0.0	0.0	3.0	0.0	0.0
Prop In Lane	1.00		0.14	1.00		0.13	0.18		0.34	0.16		0.17
Lane Grp Cap(c), veh/h	560	1093	1122	570	1093	1124	515	0	0	504	0	0
V/C Ratio(X)	0.11	0.23	0.23	0.05	0.24	0.24	0.81	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	560	1093	1122	570	1093	1124	934	0	0	914	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.8	7.8	7.8	9.4	7.8	7.8	22.6	0.0	0.0	24.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.5	0.5	0.2	0.5	0.5	2.9	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.1	3.6	3.7	0.5	3.7	3.8	9.0	0.0	0.0	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.2	8.3	8.3	9.5	8.3	8.3	25.5	0.0	0.0	24.6	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		571			556			416			81	
Approach Delay, s/veh		8.5			8.4			25.5			24.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		59.9		30.1		59.9		30.1				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 33		48.0		* 33		48.0				
Max Q Clear Time (g_c+I1), s		9.1		22.3		10.9		5.0				
Green Ext Time (p_c), s		3.4		2.8		3.4		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	115	33	30	77	57	6	980	37	6	659	54
Future Volume (veh/h)	54	115	33	30	77	57	6	980	37	6	659	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	125	36	33	84	62	7	1065	40	7	716	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	167	44	80	145	94	45	2496	93	46	2368	194
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.73	0.73	0.73	1.00	1.00	1.00
Sat Flow, veh/h	349	1036	271	205	899	585	6	3407	127	8	3232	264
Grp Volume(v), veh/h	220	0	0	179	0	0	585	0	527	413	0	369
Grp Sat Flow(s),veh/h/ln	1657	0	0	1689	0	0	1861	0	1679	1850	0	1654
Q Serve(g_s), s	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.5	0.0	0.0	8.8	0.0	0.0	10.9	0.0	11.0	0.0	0.0	0.0
Prop In Lane	0.27		0.16	0.18		0.35	0.01		0.08	0.02		0.16
Lane Grp Cap(c), veh/h	317	0	0	319	0	0	1404	0	1230	1396	0	1212
V/C Ratio(X)	0.69	0.00	0.00	0.56	0.00	0.00	0.42	0.00	0.43	0.30	0.00	0.30
Avail Cap(c_a), veh/h	539	0	0	542	0	0	1404	0	1230	1396	0	1212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.4	0.0	0.0	35.3	0.0	0.0	4.7	0.0	4.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.5	0.0	0.0	0.9	0.0	1.1	0.5	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	7.1	0.0	0.0	5.8	0.0	0.0	5.6	0.0	5.2	0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	0.0	0.0	36.9	0.0	0.0	5.6	0.0	5.8	0.5	0.0	0.6
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		220			179			1112			782	
Approach Delay, s/veh		39.1			36.9			5.7			0.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	70.4	19.6	70.4	19.6
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 54	26.9	* 54	26.9
Max Q Clear Time (g_c+I1), s	13.0	13.5	2.0	10.8
Green Ext Time (p_c), s	9.6	1.0	6.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

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

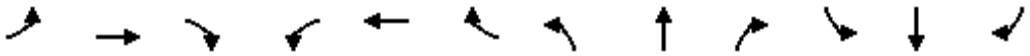
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	167	152	11	20	21
Future Vol, veh/h	22	167	152	11	20	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	182	165	12	22	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	177	0	-	0	401	171
Stage 1	-	-	-	-	171	-
Stage 2	-	-	-	-	230	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1399	-	-	-	605	873
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1399	-	-	-	594	873
Mov Cap-2 Maneuver	-	-	-	-	594	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	808	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1399	-	-	-	710
HCM Lane V/C Ratio	0.017	-	-	-	0.063
HCM Control Delay (s)	7.6	0	-	-	10.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	14	127	33	34	100	45	40	220	87	18	85	22
Future Volume (veh/h)	14	127	33	34	100	45	40	220	87	18	85	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	138	36	37	109	49	43	239	95	20	92	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	242	60	133	191	77	152	724	265	182	755	181
Arrive On Green	0.06	0.06	0.06	0.18	0.18	0.18	0.60	0.60	0.60	1.00	1.00	1.00
Sat Flow, veh/h	71	1371	339	215	1085	436	105	1199	439	149	1250	300
Grp Volume(v), veh/h	189	0	0	195	0	0	377	0	0	136	0	0
Grp Sat Flow(s),veh/h/ln	1782	0	0	1736	0	0	1743	0	0	1699	0	0
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	4.5	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.08		0.19	0.19		0.25	0.11		0.25	0.15		0.18
Lane Grp Cap(c), veh/h	401	0	0	401	0	0	1141	0	0	1117	0	0
V/C Ratio(X)	0.47	0.00	0.00	0.49	0.00	0.00	0.33	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	789	0	0	766	0	0	1141	0	0	1117	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	17.1	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.9	0.0	0.0	0.8	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	3.4	0.0	0.0	3.1	0.0	0.0	2.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	18.0	0.0	0.0	5.3	0.0	0.0	0.2	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		189			195			377			136	
Approach Delay, s/veh		20.5			18.0			5.3			0.2	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.1		12.9		32.1		12.9				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		6.8		6.6		2.0		6.5				
Green Ext Time (p_c), s		1.7		0.7		0.6		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

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

Existing with Project Conditions 2019
Morning Peak Hour

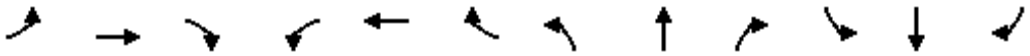
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	437	13	8	696	0	91
Future Vol, veh/h	437	13	8	696	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	475	14	9	757	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	489	0	803	245
Stage 1	-	-	-	-	482	-
Stage 2	-	-	-	-	321	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	1070	-	353	755
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1070	-	348	755
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	755	-	-	1070	-
HCM Lane V/C Ratio	0.131	-	-	0.008	-
HCM Control Delay (s)	10.5	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	453	79	60	612	30	3	30	34	6	256	48
Future Volume (veh/h)	15	453	79	60	612	30	3	30	34	6	256	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	492	86	65	665	33	3	33	37	7	278	52
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	2035	354	588	2317	115	46	183	193	44	338	62
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	748	3026	526	836	3446	171	18	826	868	13	1522	280
Grp Volume(v), veh/h	16	288	290	65	343	355	73	0	0	337	0	0
Grp Sat Flow(s),veh/h/ln	748	1777	1776	836	1777	1840	1712	0	0	1815	0	0
Q Serve(g_s), s	0.8	5.7	5.8	3.0	7.0	7.1	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	7.9	5.7	5.8	8.7	7.0	7.1	3.1	0.0	0.0	15.9	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.09	0.04		0.51	0.02		0.15
Lane Grp Cap(c), veh/h	524	1195	1194	588	1195	1237	422	0	0	444	0	0
V/C Ratio(X)	0.03	0.24	0.24	0.11	0.29	0.29	0.17	0.00	0.00	0.76	0.00	0.00
Avail Cap(c_a), veh/h	524	1195	1194	588	1195	1237	792	0	0	845	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.6	5.8	5.8	7.5	6.0	6.0	28.4	0.0	0.0	33.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.4	0.6	0.6	0.2	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.2	3.4	3.5	1.0	4.1	4.2	2.3	0.0	0.0	10.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	6.2	6.3	7.9	6.6	6.6	28.6	0.0	0.0	36.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	D	A	A
Approach Vol, veh/h		594			763			73			337	
Approach Delay, s/veh		6.3			6.7			28.6			36.1	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		65.0		25.0		65.0		25.0				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 41		40.0		* 41		40.0				
Max Q Clear Time (g_c+I1), s		10.7		5.1		9.9		17.9				
Green Ext Time (p_c), s		5.3		0.4		4.0		2.0				

Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			B									

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	63	20	13	57	26	14	839	33	18	969	39
Future Volume (veh/h)	25	63	20	13	57	26	14	839	33	18	969	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	68	22	14	62	28	15	912	36	20	1053	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	102	30	58	104	43	58	2685	105	63	2678	106
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.80	0.80	0.80	1.00	1.00	1.00
Sat Flow, veh/h	297	1134	331	145	1155	479	21	3342	131	27	3333	132
Grp Volume(v), veh/h	117	0	0	104	0	0	501	0	462	579	0	536
Grp Sat Flow(s),veh/h/ln	1762	0	0	1778	0	0	1815	0	1679	1813	0	1678
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	5.0	0.0	0.0	6.5	0.0	6.7	0.0	0.0	0.0
Prop In Lane	0.23		0.19	0.13		0.27	0.03		0.08	0.03		0.08
Lane Grp Cap(c), veh/h	208	0	0	205	0	0	1500	0	1349	1498	0	1348
V/C Ratio(X)	0.56	0.00	0.00	0.51	0.00	0.00	0.33	0.00	0.34	0.39	0.00	0.40
Avail Cap(c_a), veh/h	479	0	0	483	0	0	1500	0	1349	1498	0	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	0.0	39.6	0.0	0.0	2.4	0.0	2.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	1.9	0.0	0.0	0.6	0.0	0.7	0.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	4.3	0.0	0.0	3.9	0.0	0.0	2.9	0.0	2.8	0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	0.0	0.0	41.5	0.0	0.0	3.0	0.0	3.1	0.8	0.0	0.9
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		117			104			963			1115	
Approach Delay, s/veh		42.2			41.5			3.0			0.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	76.8	13.2	76.8	13.2
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 58	22.9	* 58	22.9
Max Q Clear Time (g_c+I1), s	8.7	7.7	2.0	7.0
Green Ext Time (p_c), s	8.1	0.5	10.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Notes

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

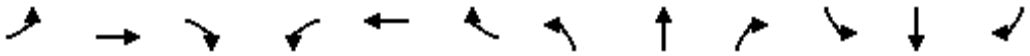
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	110	108	93	7	14
Future Vol, veh/h	22	110	108	93	7	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	120	117	101	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	218	0	-	0	336	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1352	-	-	-	659	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1352	-	-	-	646	876
Mov Cap-2 Maneuver	-	-	-	-	646	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1352	-	-	-	783
HCM Lane V/C Ratio	0.018	-	-	-	0.029
HCM Control Delay (s)	7.7	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	10	60	41	44	105	40	43	79	18	16	255	74
Future Volume (veh/h)	10	60	41	44	105	40	43	79	18	16	255	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	65	45	48	114	43	47	86	20	17	277	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	178	113	148	186	62	332	574	121	101	834	232
Arrive On Green	0.06	0.06	0.06	0.17	0.17	0.17	0.61	0.61	0.61	0.80	0.80	0.80
Sat Flow, veh/h	74	1017	646	280	1066	357	376	949	199	28	1378	383
Grp Volume(v), veh/h	121	0	0	205	0	0	153	0	0	374	0	0
Grp Sat Flow(s),veh/h/ln	1737	0	0	1702	0	0	1524	0	0	1789	0	0
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	4.9	0.0	0.0	1.6	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.09		0.37	0.23		0.21	0.31		0.13	0.05		0.21
Lane Grp Cap(c), veh/h	391	0	0	396	0	0	1027	0	0	1166	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.52	0.00	0.00	0.15	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	769	0	0	764	0	0	1027	0	0	1166	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.72	0.00	0.00
Uniform Delay (d), s/veh	18.9	0.0	0.0	17.3	0.0	0.0	3.8	0.0	0.0	2.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	2.1	0.0	0.0	3.2	0.0	0.0	0.8	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	0.0	18.4	0.0	0.0	4.1	0.0	0.0	2.5	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		121			205			153			374	
Approach Delay, s/veh		19.4			18.4			4.1			2.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.1		12.9		32.1		12.9				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		3.6		5.0		4.5		6.9				
Green Ext Time (p_c), s		0.7		0.5		1.9		0.8				

Intersection Summary		
HCM 6th Ctrl Delay	9.0	
HCM 6th LOS	A	

Notes

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

Existing with Project Conditions 2019
Afternoon Peak Hour

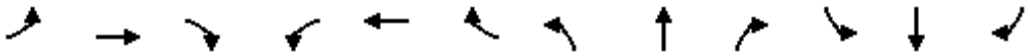
Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	20	13	662	2	104
Future Vol, veh/h	509	20	13	662	2	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	553	22	14	720	2	113

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	575	0	880	288
Stage 1	-	-	-	-	564	-
Stage 2	-	-	-	-	316	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	994	-	319	709
Stage 1	-	-	-	-	517	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	994	-	312	709
Mov Cap-2 Maneuver	-	-	-	-	312	-
Stage 1	-	-	-	-	517	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	692	-	-	994	-
HCM Lane V/C Ratio	0.166	-	-	0.014	-
HCM Control Delay (s)	11.2	-	-	8.7	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	463	98	26	453	33	67	185	131	12	54	13
Future Volume (veh/h)	58	463	98	26	453	33	67	185	131	12	54	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	503	107	28	492	36	73	201	142	13	59	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	560	1795	380	513	2065	151	111	244	160	86	348	76
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.47	0.47	0.47	0.28	0.28	0.28
Sat Flow, veh/h	875	2918	618	811	3358	245	230	872	571	144	1247	271
Grp Volume(v), veh/h	63	305	305	28	260	268	416	0	0	86	0	0
Grp Sat Flow(s),veh/h/ln	875	1777	1759	811	1777	1826	1673	0	0	1662	0	0
Q Serve(g_s), s	3.2	7.2	7.3	1.5	5.9	6.0	15.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.1	7.2	7.3	8.8	5.9	6.0	20.3	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.13	0.18		0.34	0.15		0.16
Lane Grp Cap(c), veh/h	560	1093	1082	513	1093	1123	515	0	0	510	0	0
V/C Ratio(X)	0.11	0.28	0.28	0.05	0.24	0.24	0.81	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	560	1093	1082	513	1093	1123	934	0	0	923	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.9	8.1	8.1	10.1	7.8	7.8	22.6	0.0	0.0	24.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.6	0.7	0.2	0.5	0.5	2.9	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.1	4.4	4.4	0.5	3.7	3.8	9.0	0.0	0.0	2.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	8.7	8.7	10.3	8.3	8.3	25.5	0.0	0.0	24.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		673			556			416			86	
Approach Delay, s/veh		8.9			8.4			25.5			24.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		59.9		30.1		59.9		30.1				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 33		48.0		* 33		48.0				
Max Q Clear Time (g_c+I1), s		10.8		22.3		11.1		5.2				
Green Ext Time (p_c), s		3.4		2.9		4.2		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			B									

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	122	33	31	87	57	6	980	44	6	659	54
Future Volume (veh/h)	54	122	33	31	87	57	6	980	44	6	659	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	133	36	34	95	62	7	1065	48	7	716	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	176	43	80	157	91	44	2455	110	46	2348	192
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.73	0.73	0.73	1.00	1.00	1.00
Sat Flow, veh/h	332	1055	260	197	942	547	6	3379	152	8	3232	264
Grp Volume(v), veh/h	228	0	0	191	0	0	590	0	530	413	0	369
Grp Sat Flow(s),veh/h/ln	1647	0	0	1686	0	0	1861	0	1675	1850	0	1654
Q Serve(g_s), s	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	0.0	0.0	9.4	0.0	0.0	11.3	0.0	11.4	0.0	0.0	0.0
Prop In Lane	0.26		0.16	0.18		0.32	0.01		0.09	0.02		0.16
Lane Grp Cap(c), veh/h	325	0	0	328	0	0	1393	0	1217	1385	0	1202
V/C Ratio(X)	0.70	0.00	0.00	0.58	0.00	0.00	0.42	0.00	0.44	0.30	0.00	0.31
Avail Cap(c_a), veh/h	537	0	0	542	0	0	1393	0	1217	1385	0	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	0.0	35.1	0.0	0.0	4.9	0.0	4.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	1.6	0.0	0.0	0.9	0.0	1.1	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	7.3	0.0	0.0	6.1	0.0	0.0	5.8	0.0	5.4	0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	0.0	0.0	36.7	0.0	0.0	5.9	0.0	6.1	0.6	0.0	0.7
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		228			191			1120			782	
Approach Delay, s/veh		38.9			36.7			6.0			0.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	69.9	20.1	69.9	20.1
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 54	26.9	* 54	26.9
Max Q Clear Time (g_c+I1), s	13.4	14.0	2.0	11.4
Green Ext Time (p_c), s	9.7	1.0	6.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Notes

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

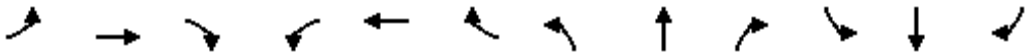
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	167	163	100	20	21
Future Vol, veh/h	35	167	163	100	20	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	182	177	109	22	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	286	0	-	0	490	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	258	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1276	-	-	-	537	807
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1276	-	-	-	519	807
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	785	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1276	-	-	-	635
HCM Lane V/C Ratio	0.03	-	-	-	0.07
HCM Control Delay (s)	7.9	0	-	-	11.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	14	127	33	34	135	45	40	220	87	18	88	87
Future Volume (veh/h)	14	127	33	34	135	45	40	220	87	18	88	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	138	36	37	147	49	43	239	95	20	96	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	256	63	126	224	68	150	709	260	131	505	449
Arrive On Green	0.06	0.06	0.06	0.19	0.19	0.19	0.59	0.59	0.59	0.99	0.99	0.99
Sat Flow, veh/h	70	1379	341	178	1204	368	103	1194	437	73	849	755
Grp Volume(v), veh/h	189	0	0	233	0	0	377	0	0	211	0	0
Grp Sat Flow(s),veh/h/ln	1790	0	0	1750	0	0	1733	0	0	1677	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	5.5	0.0	0.0	4.9	0.0	0.0	0.1	0.0	0.0
Prop In Lane	0.08		0.19	0.16		0.21	0.11		0.25	0.09		0.45
Lane Grp Cap(c), veh/h	419	0	0	418	0	0	1119	0	0	1084	0	0
V/C Ratio(X)	0.45	0.00	0.00	0.56	0.00	0.00	0.34	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	790	0	0	774	0	0	1119	0	0	1084	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.3	0.0	0.0	17.1	0.0	0.0	4.7	0.0	0.0	0.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.2	0.0	0.0	0.8	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	3.3	0.0	0.0	3.6	0.0	0.0	2.3	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	0.0	18.3	0.0	0.0	5.5	0.0	0.0	0.5	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		189			233			377			211	
Approach Delay, s/veh		20.1			18.3			5.5			0.5	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.6		13.4		31.6		13.4				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		6.9		6.6		2.1		7.5				
Green Ext Time (p_c), s		1.7		0.7		1.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									

Notes

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

Future without Project Conditions
2022 Morning Peak Hour

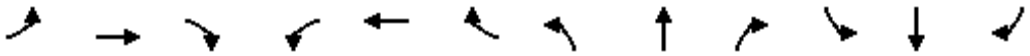
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	697	5	8	923	0	5
Future Vol, veh/h	697	5	8	923	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	758	5	9	1003	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	763	0	1180	382
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	419	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	845	-	215	616
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	597	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	845	-	210	616
Mov Cap-2 Maneuver	-	-	-	-	210	-
Stage 1	-	-	-	-	410	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	616	-	-	845	-
HCM Lane V/C Ratio	0.009	-	-	0.01	-
HCM Control Delay (s)	10.9	-	-	9.3	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	632	51	207	804	74	26	44	187	52	274	59
Future Volume (veh/h)	39	632	51	207	804	74	26	44	187	52	274	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	687	55	225	874	80	28	48	203	57	298	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	2075	166	456	2049	188	69	95	320	91	348	71
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	588	3333	267	718	3292	301	93	348	1178	169	1282	262
Grp Volume(v), veh/h	42	366	376	225	472	482	279	0	0	419	0	0
Grp Sat Flow(s),veh/h/ln	588	1777	1822	718	1777	1816	1619	0	0	1712	0	0
Q Serve(g_s), s	3.6	8.8	8.8	19.5	12.3	12.3	0.0	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear(g_c), s	15.8	8.8	8.8	28.4	12.3	12.3	13.4	0.0	0.0	21.1	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.17	0.10		0.73	0.14		0.15
Lane Grp Cap(c), veh/h	366	1106	1135	456	1106	1131	484	0	0	511	0	0
V/C Ratio(X)	0.11	0.33	0.33	0.49	0.43	0.43	0.58	0.00	0.00	0.82	0.00	0.00
Avail Cap(c_a), veh/h	366	1106	1135	456	1106	1131	562	0	0	595	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.8	8.1	8.1	14.8	8.7	8.7	28.7	0.0	0.0	31.4	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.8	0.8	3.8	1.2	1.2	1.0	0.0	0.0	7.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	0.9	5.1	5.3	5.4	6.8	6.9	7.6	0.0	0.0	12.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	8.9	8.9	18.6	9.9	9.9	29.7	0.0	0.0	39.2	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		784			1179			279			419	
Approach Delay, s/veh		9.1			11.6			29.7			39.2	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.5		29.5		60.5		29.5				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 52		29.0		* 52		29.0				
Max Q Clear Time (g_c+I1), s		30.4		15.4		17.8		23.1				
Green Ext Time (p_c), s		8.5		1.5		5.8		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			17.1									
HCM 6th LOS			B									

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	140	59	12	131	32	62	908	28	33	1039	103
Future Volume (veh/h)	76	140	59	12	131	32	62	908	28	33	1039	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	152	64	13	142	35	67	987	30	36	1129	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	192	74	55	304	71	140	1961	59	79	2063	202
Arrive On Green	0.21	0.21	0.21	0.07	0.07	0.07	0.68	0.68	0.68	1.00	1.00	1.00
Sat Flow, veh/h	370	894	344	55	1415	332	139	2889	87	54	3040	298
Grp Volume(v), veh/h	299	0	0	190	0	0	500	0	584	658	0	619
Grp Sat Flow(s),veh/h/ln	1608	0	0	1802	0	0	1429	0	1686	1743	0	1648
Q Serve(g_s), s	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.0	0.0	0.0	9.1	0.0	0.0	10.5	0.0	15.3	0.0	0.0	0.0
Prop In Lane	0.28		0.21	0.07		0.18	0.13		0.05	0.05		0.18
Lane Grp Cap(c), veh/h	396	0	0	429	0	0	1015	0	1145	1225	0	1119
V/C Ratio(X)	0.75	0.00	0.00	0.44	0.00	0.00	0.49	0.00	0.51	0.54	0.00	0.55
Avail Cap(c_a), veh/h	546	0	0	595	0	0	1015	0	1145	1225	0	1119
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	0.0	37.1	0.0	0.0	6.3	0.0	7.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.7	0.0	0.0	1.7	0.0	1.6	1.7	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	9.2	0.0	0.0	6.6	0.0	0.0	6.1	0.0	7.5	1.0	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	0.0	37.8	0.0	0.0	8.0	0.0	8.7	1.7	0.0	2.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		299			190			1084			1277	
Approach Delay, s/veh		37.8			37.8			8.4			1.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.6	24.4	65.6	24.4
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 53	27.9	* 53	27.9
Max Q Clear Time (g_c+I1), s	17.3	18.0	2.0	11.1
Green Ext Time (p_c), s	10.2	1.3	13.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

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

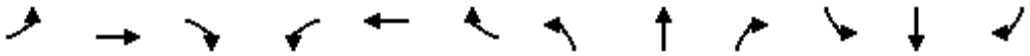
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	209	187	13	7	14
Future Vol, veh/h	10	209	187	13	7	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	227	203	14	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	217	0	-	0	459	210
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	249	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1353	-	-	-	560	830
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1353	-	-	-	555	830
Mov Cap-2 Maneuver	-	-	-	-	555	-
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1353	-	-	-	712
HCM Lane V/C Ratio	0.008	-	-	-	0.032
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	69	99	42	60	105	72	44	179	39	56	350	74
Future Volume (veh/h)	69	99	42	60	105	72	44	179	39	56	350	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	108	46	65	114	78	48	195	42	61	380	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	188	69	165	176	105	194	716	141	158	789	155
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.58	0.58	0.58	1.00	1.00	1.00
Sat Flow, veh/h	434	936	344	325	877	524	173	1236	244	118	1361	268
Grp Volume(v), veh/h	229	0	0	257	0	0	285	0	0	521	0	0
Grp Sat Flow(s),veh/h/ln	1714	0	0	1725	0	0	1653	0	0	1747	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	6.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.33		0.20	0.25		0.30	0.17		0.15	0.12		0.15
Lane Grp Cap(c), veh/h	450	0	0	446	0	0	1051	0	0	1102	0	0
V/C Ratio(X)	0.51	0.00	0.00	0.58	0.00	0.00	0.27	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	755	0	0	761	0	0	1051	0	0	1102	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.52	0.00	0.00
Uniform Delay (d), s/veh	19.4	0.0	0.0	16.8	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.2	0.0	0.0	0.6	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	3.9	0.0	0.0	3.8	0.0	0.0	1.8	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	0.0	18.0	0.0	0.0	5.4	0.0	0.0	0.8	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		229			257			285			521	
Approach Delay, s/veh		20.3			18.0			5.4			0.8	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.0		14.0		31.0		14.0				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		5.5		7.6		2.0		8.0				
Green Ext Time (p_c), s		1.3		0.9		3.1		1.1				

Intersection Summary		
HCM 6th Ctrl Delay	8.7	
HCM 6th LOS	A	

Notes

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

Future without Project Conditions
2022 Afternoon Peak Hour

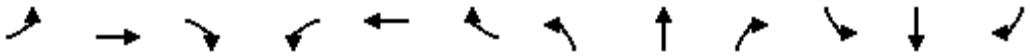
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	819	11	13	1065	2	9
Future Vol, veh/h	819	11	13	1065	2	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	890	12	14	1158	2	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	902	0	1387	451
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	491	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	749	-	162	556
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	547	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	749	-	154	556
Mov Cap-2 Maneuver	-	-	-	-	154	-
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	519	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	377	-	-	749	-
HCM Lane V/C Ratio	0.032	-	-	0.019	-
HCM Control Delay (s)	14.9	-	-	9.9	0.2
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	691	70	260	761	102	118	204	339	73	67	53
Future Volume (veh/h)	75	691	70	260	761	102	118	204	339	73	67	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	751	76	283	827	111	128	222	368	79	73	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	1720	174	336	1662	223	140	193	300	155	140	92
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.61	0.61	0.61	0.37	0.37	0.37
Sat Flow, veh/h	597	3258	330	663	3149	423	252	526	819	273	382	250
Grp Volume(v), veh/h	82	409	418	283	467	471	718	0	0	210	0	0
Grp Sat Flow(s),veh/h/ln	597	1777	1811	663	1777	1794	1597	0	0	905	0	0
Q Serve(g_s), s	9.2	12.7	12.7	34.8	15.1	15.1	18.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	24.3	12.7	12.7	47.5	15.1	15.1	33.0	0.0	0.0	14.6	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.24	0.18		0.51	0.38		0.28
Lane Grp Cap(c), veh/h	295	938	956	336	938	947	633	0	0	387	0	0
V/C Ratio(X)	0.28	0.44	0.44	0.84	0.50	0.50	1.13	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	295	938	956	336	938	947	633	0	0	387	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.4	13.0	13.0	29.3	13.6	13.6	18.6	0.0	0.0	21.7	0.0	0.0
Incr Delay (d2), s/veh	2.3	1.5	1.5	21.9	1.9	1.9	74.1	0.0	0.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	2.6	7.5	7.6	11.2	8.7	8.8	28.4	0.0	0.0	5.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	14.5	14.5	51.1	15.5	15.5	92.7	0.0	0.0	23.3	0.0	0.0
LnGrp LOS	C	B	B	D	B	B	F	A	A	C	A	A
Approach Vol, veh/h		909			1221			718			210	
Approach Delay, s/veh		15.3			23.8			92.7			23.3	
Approach LOS		B			C			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		38.0				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 48		33.0		* 48		33.0				
Max Q Clear Time (g_c+I1), s		49.5		35.0		26.3		16.6				
Green Ext Time (p_c), s		0.0		0.0		6.3		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		37.4
HCM 6th LOS		D

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	229	96	41	215	59	6	1035	46	6	733	171
Future Volume (veh/h)	138	229	96	41	215	59	6	1035	46	6	733	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	249	104	45	234	64	7	1125	50	7	797	186
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	289	115	94	430	110	43	1804	80	44	1487	345
Arrive On Green	0.36	0.36	0.36	0.72	0.72	0.72	0.53	0.53	0.53	1.00	1.00	1.00
Sat Flow, veh/h	419	805	319	136	1197	306	5	3378	149	6	2785	646
Grp Volume(v), veh/h	503	0	0	343	0	0	622	0	560	533	0	457
Grp Sat Flow(s),veh/h/ln	1543	0	0	1638	0	0	1858	0	1675	1852	0	1586
Q Serve(g_s), s	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	27.6	0.0	0.0	7.7	0.0	0.0	20.9	0.0	21.1	0.0	0.0	0.0
Prop In Lane	0.30		0.21	0.13		0.19	0.01		0.09	0.01		0.41
Lane Grp Cap(c), veh/h	607	0	0	634	0	0	1032	0	894	1029	0	847
V/C Ratio(X)	0.83	0.00	0.00	0.54	0.00	0.00	0.60	0.00	0.63	0.52	0.00	0.54
Avail Cap(c_a), veh/h	748	0	0	790	0	0	1032	0	894	1029	0	847
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	0.0	9.2	0.0	0.0	14.6	0.0	14.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	6.5	0.0	0.0	0.7	0.0	0.0	2.6	0.0	3.3	1.9	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	14.2	0.0	0.0	3.9	0.0	0.0	12.0	0.0	11.2	1.0	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	0.0	0.0	9.9	0.0	0.0	17.2	0.0	18.0	1.9	0.0	2.5
LnGrp LOS	C	A	A	A	A	A	B	A	B	A	A	A
Approach Vol, veh/h		503			343			1182			990	
Approach Delay, s/veh		33.4			9.9			17.6			2.1	
Approach LOS		C			A			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	52.6	37.4	52.6	37.4
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 40	40.9	* 40	40.9
Max Q Clear Time (g_c+I1), s	23.1	29.6	2.0	9.7
Green Ext Time (p_c), s	7.5	2.7	8.2	2.4

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

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

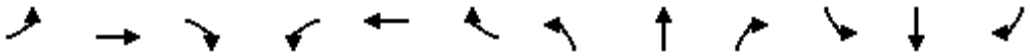
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	23	291	302	11	21	22
Future Vol, veh/h	23	291	302	11	21	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	316	328	12	23	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	340	0	-	0	700	334
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1219	-	-	-	405	708
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1219	-	-	-	395	708
Mov Cap-2 Maneuver	-	-	-	-	395	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1219	-	-	-	510
HCM Lane V/C Ratio	0.021	-	-	-	0.092
HCM Control Delay (s)	8	0	-	-	12.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	96	168	34	55	151	105	41	353	107	62	230	120
Future Volume (veh/h)	96	168	34	55	151	105	41	353	107	62	230	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	183	37	60	164	114	45	384	116	67	250	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	268	48	148	244	152	125	673	192	167	528	247
Arrive On Green	0.09	0.09	0.09	0.26	0.26	0.26	0.52	0.52	0.52	0.17	0.17	0.17
Sat Flow, veh/h	408	1030	185	208	938	583	75	1294	370	145	1016	476
Grp Volume(v), veh/h	324	0	0	338	0	0	545	0	0	447	0	0
Grp Sat Flow(s),veh/h/ln	1624	0	0	1729	0	0	1739	0	0	1637	0	0
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Cycle Q Clear(g_c), s	8.5	0.0	0.0	7.8	0.0	0.0	9.4	0.0	0.0	10.3	0.0	0.0
Prop In Lane	0.32		0.11	0.18		0.34	0.08		0.21	0.15		0.29
Lane Grp Cap(c), veh/h	529	0	0	544	0	0	990	0	0	943	0	0
V/C Ratio(X)	0.61	0.00	0.00	0.62	0.00	0.00	0.55	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	738	0	0	768	0	0	990	0	0	943	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.42	0.00	0.00
Uniform Delay (d), s/veh	19.0	0.0	0.0	15.2	0.0	0.0	7.4	0.0	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.2	0.0	0.0	2.2	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	5.4	0.0	0.0	4.6	0.0	0.0	4.9	0.0	0.0	5.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	0.0	16.4	0.0	0.0	9.6	0.0	0.0	13.9	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h		324			338			545			447	
Approach Delay, s/veh		20.1			16.4			9.6			13.9	
Approach LOS		C			B			A			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.3		16.7		28.3		16.7				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		11.4		10.5		12.3		9.8				
Green Ext Time (p_c), s		1.8		1.2		1.3		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

Notes

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

Future with Project Conditions 2022
Morning Peak Hour

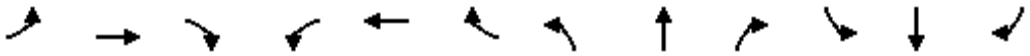
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	697	13	8	923	0	91
Future Vol, veh/h	697	13	8	923	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	758	14	9	1003	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	772	0	1184	386
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	419	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	839	-	213	612
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	597	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	839	-	208	612
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	612	-	-	839	-
HCM Lane V/C Ratio	0.162	-	-	0.01	-
HCM Control Delay (s)	12	-	-	9.3	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	655	110	207	804	74	26	44	187	52	278	59
Future Volume (veh/h)	43	655	110	207	804	74	26	44	187	52	278	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	712	120	225	874	80	28	48	203	57	302	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	1893	319	414	2048	187	69	95	320	91	350	71
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	588	3042	512	660	3292	301	92	348	1176	167	1287	259
Grp Volume(v), veh/h	47	416	416	225	472	482	279	0	0	423	0	0
Grp Sat Flow(s),veh/h/ln	588	1777	1778	660	1777	1816	1616	0	0	1714	0	0
Q Serve(g_s), s	4.0	10.4	10.4	23.0	12.3	12.3	0.0	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear(g_c), s	16.3	10.4	10.4	33.4	12.3	12.3	13.4	0.0	0.0	21.4	0.0	0.0
Prop In Lane	1.00		0.29	1.00		0.17	0.10		0.73	0.13		0.15
Lane Grp Cap(c), veh/h	366	1106	1106	414	1106	1130	484	0	0	512	0	0
V/C Ratio(X)	0.13	0.38	0.38	0.54	0.43	0.43	0.58	0.00	0.00	0.83	0.00	0.00
Avail Cap(c_a), veh/h	366	1106	1106	414	1106	1130	544	0	0	577	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	8.4	8.4	16.6	8.7	8.7	28.7	0.0	0.0	31.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	1.0	1.0	5.0	1.2	1.2	1.1	0.0	0.0	8.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.0	5.9	5.9	5.8	6.8	6.9	7.6	0.0	0.0	13.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	9.4	9.4	21.7	9.9	9.9	29.8	0.0	0.0	40.2	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	C	A	A	D	A	A
Approach Vol, veh/h		879			1179			279			423	
Approach Delay, s/veh		9.6			12.2			29.8			40.2	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.5		29.5		60.5		29.5				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 53		28.0		* 53		28.0				
Max Q Clear Time (g_c+I1), s		35.4		15.4		18.3		23.4				
Green Ext Time (p_c), s		7.8		1.4		6.9		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		17.4
HCM 6th LOS		B

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	146	59	13	140	32	62	908	34	33	1039	103
Future Volume (veh/h)	76	146	59	13	140	32	62	908	34	33	1039	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	159	64	14	152	35	67	987	37	36	1129	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	200	74	55	315	69	138	1934	71	78	2046	201
Arrive On Green	0.22	0.22	0.22	0.07	0.07	0.07	0.67	0.67	0.67	1.00	1.00	1.00
Sat Flow, veh/h	358	907	335	57	1430	314	138	2873	106	54	3039	298
Grp Volume(v), veh/h	306	0	0	201	0	0	504	0	587	658	0	619
Grp Sat Flow(s),veh/h/ln	1600	0	0	1801	0	0	1434	0	1683	1742	0	1648
Q Serve(g_s), s	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	0.0	9.6	0.0	0.0	10.9	0.0	15.7	0.0	0.0	0.0
Prop In Lane	0.27		0.21	0.07		0.17	0.13		0.06	0.05		0.18
Lane Grp Cap(c), veh/h	403	0	0	439	0	0	1011	0	1133	1215	0	1110
V/C Ratio(X)	0.76	0.00	0.00	0.46	0.00	0.00	0.50	0.00	0.52	0.54	0.00	0.56
Avail Cap(c_a), veh/h	548	0	0	599	0	0	1011	0	1133	1215	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	37.0	0.0	0.0	6.6	0.0	7.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.2	0.0	0.0	0.7	0.0	0.0	1.8	0.0	1.7	1.7	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	9.4	0.0	0.0	6.9	0.0	0.0	6.3	0.0	7.7	1.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	0.0	37.7	0.0	0.0	8.3	0.0	9.1	1.7	0.0	2.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		306			201			1091			1277	
Approach Delay, s/veh		37.8			37.7			8.7			1.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.1	24.9	65.1	24.9
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 52	28.1	* 52	28.1
Max Q Clear Time (g_c+I1), s	17.7	18.5	2.0	11.6
Green Ext Time (p_c), s	10.3	1.3	13.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

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

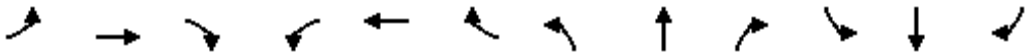
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	209	198	93	7	14
Future Vol, veh/h	22	209	198	93	7	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	227	215	101	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	541	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	502	773
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1244	-	-	-	491	773
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	771	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1244	-	-	-	649
HCM Lane V/C Ratio	0.019	-	-	-	0.035
HCM Control Delay (s)	8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	69	99	42	60	136	72	44	179	39	56	353	133
Future Volume (veh/h)	69	99	42	60	136	72	44	179	39	56	353	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	108	46	65	148	78	48	195	42	61	384	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	208	75	160	219	103	187	686	135	146	670	237
Arrive On Green	0.07	0.07	0.07	0.22	0.22	0.22	0.56	0.56	0.56	1.00	1.00	1.00
Sat Flow, veh/h	413	937	339	278	985	463	167	1229	241	104	1200	425
Grp Volume(v), veh/h	229	0	0	291	0	0	285	0	0	590	0	0
Grp Sat Flow(s),veh/h/ln	1688	0	0	1726	0	0	1637	0	0	1728	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	6.8	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.33		0.20	0.22		0.27	0.17		0.15	0.10		0.25
Lane Grp Cap(c), veh/h	481	0	0	481	0	0	1007	0	0	1053	0	0
V/C Ratio(X)	0.48	0.00	0.00	0.61	0.00	0.00	0.28	0.00	0.00	0.56	0.00	0.00
Avail Cap(c_a), veh/h	750	0	0	767	0	0	1007	0	0	1053	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.46	0.00	0.00
Uniform Delay (d), s/veh	18.8	0.0	0.0	16.3	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.2	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	3.9	0.0	0.0	4.2	0.0	0.0	2.0	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	0.0	17.5	0.0	0.0	5.9	0.0	0.0	1.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		229			291			285			590	
Approach Delay, s/veh		19.5			17.5			5.9			1.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.0		15.0		30.0		15.0				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		5.7		7.6		2.0		8.8				
Green Ext Time (p_c), s		1.4		0.9		3.7		1.2				

Intersection Summary		
HCM 6th Ctrl Delay	8.5	
HCM 6th LOS	A	

Notes

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

Future with Project Conditions 2022
Afternoon Peak Hour

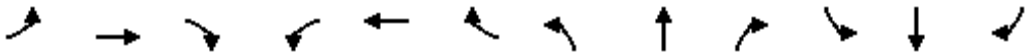
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	697	13	8	923	0	91
Future Vol, veh/h	697	13	8	923	0	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	35	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	758	14	9	1003	0	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	772	0	1184	386
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	419	-
Critical Hdwy	-	-	4.14	-	6.29	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	6.04	-
Follow-up Hdwy	-	-	2.22	-	3.67	3.32
Pot Cap-1 Maneuver	-	-	839	-	213	612
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	597	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	839	-	208	612
Mov Cap-2 Maneuver	-	-	-	-	208	-
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	612	-	-	839	-
HCM Lane V/C Ratio	0.162	-	-	0.01	-
HCM Control Delay (s)	12	-	-	9.3	0.1
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	655	110	207	804	74	26	44	187	52	278	59
Future Volume (veh/h)	43	655	110	207	804	74	26	44	187	52	278	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	712	120	225	874	80	28	48	203	57	302	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	1893	319	414	2048	187	69	95	320	91	350	71
Arrive On Green	0.62	0.62	0.62	0.62	0.62	0.62	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	588	3042	512	660	3292	301	92	348	1176	167	1287	259
Grp Volume(v), veh/h	47	416	416	225	472	482	279	0	0	423	0	0
Grp Sat Flow(s),veh/h/ln	588	1777	1778	660	1777	1816	1616	0	0	1714	0	0
Q Serve(g_s), s	4.0	10.4	10.4	23.0	12.3	12.3	0.0	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear(g_c), s	16.3	10.4	10.4	33.4	12.3	12.3	13.4	0.0	0.0	21.4	0.0	0.0
Prop In Lane	1.00		0.29	1.00		0.17	0.10		0.73	0.13		0.15
Lane Grp Cap(c), veh/h	366	1106	1106	414	1106	1130	484	0	0	512	0	0
V/C Ratio(X)	0.13	0.38	0.38	0.54	0.43	0.43	0.58	0.00	0.00	0.83	0.00	0.00
Avail Cap(c_a), veh/h	366	1106	1106	414	1106	1130	544	0	0	577	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	8.4	8.4	16.6	8.7	8.7	28.7	0.0	0.0	31.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	1.0	1.0	5.0	1.2	1.2	1.1	0.0	0.0	8.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	1.0	5.9	5.9	5.8	6.8	6.9	7.6	0.0	0.0	13.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	9.4	9.4	21.7	9.9	9.9	29.8	0.0	0.0	40.2	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	C	A	A	D	A	A
Approach Vol, veh/h		879			1179			279			423	
Approach Delay, s/veh		9.6			12.2			29.8			40.2	
Approach LOS		A			B			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.5		29.5		60.5		29.5				
Change Period (Y+Rc), s		* 4.5		5.0		* 4.5		5.0				
Max Green Setting (Gmax), s		* 53		28.0		* 53		28.0				
Max Q Clear Time (g_c+I1), s		35.4		15.4		18.3		23.4				
Green Ext Time (p_c), s		7.8		1.4		6.9		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		17.4
HCM 6th LOS		B

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	146	59	13	140	32	62	908	34	33	1039	103
Future Volume (veh/h)	76	146	59	13	140	32	62	908	34	33	1039	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	159	64	14	152	35	67	987	37	36	1129	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	200	74	55	315	69	138	1934	71	78	2046	201
Arrive On Green	0.22	0.22	0.22	0.07	0.07	0.07	0.67	0.67	0.67	1.00	1.00	1.00
Sat Flow, veh/h	358	907	335	57	1430	314	138	2873	106	54	3039	298
Grp Volume(v), veh/h	306	0	0	201	0	0	504	0	587	658	0	619
Grp Sat Flow(s),veh/h/ln	1600	0	0	1801	0	0	1434	0	1683	1742	0	1648
Q Serve(g_s), s	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	0.0	9.6	0.0	0.0	10.9	0.0	15.7	0.0	0.0	0.0
Prop In Lane	0.27		0.21	0.07		0.17	0.13		0.06	0.05		0.18
Lane Grp Cap(c), veh/h	403	0	0	439	0	0	1011	0	1133	1215	0	1110
V/C Ratio(X)	0.76	0.00	0.00	0.46	0.00	0.00	0.50	0.00	0.52	0.54	0.00	0.56
Avail Cap(c_a), veh/h	548	0	0	599	0	0	1011	0	1133	1215	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	37.0	0.0	0.0	6.6	0.0	7.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	4.2	0.0	0.0	0.7	0.0	0.0	1.8	0.0	1.7	1.7	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	9.4	0.0	0.0	6.9	0.0	0.0	6.3	0.0	7.7	1.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	0.0	37.7	0.0	0.0	8.3	0.0	9.1	1.7	0.0	2.0
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		306			201			1091			1277	
Approach Delay, s/veh		37.8			37.7			8.7			1.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.1	24.9	65.1	24.9
Change Period (Y+Rc), s	* 4.5	5.1	* 4.5	5.1
Max Green Setting (Gmax), s	* 52	28.1	* 52	28.1
Max Q Clear Time (g_c+I1), s	17.7	18.5	2.0	11.6
Green Ext Time (p_c), s	10.3	1.3	13.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

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

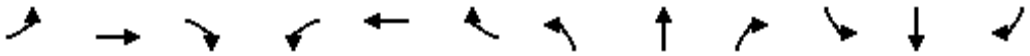
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	209	198	93	7	14
Future Vol, veh/h	22	209	198	93	7	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	227	215	101	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	316	0	-	0	541	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	502	773
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1244	-	-	-	491	773
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	771	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1244	-	-	-	649
HCM Lane V/C Ratio	0.019	-	-	-	0.035
HCM Control Delay (s)	8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Volume (veh/h)	69	99	42	60	136	72	44	179	39	56	353	133
Future Volume (veh/h)	69	99	42	60	136	72	44	179	39	56	353	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	108	46	65	148	78	48	195	42	61	384	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	208	75	160	219	103	191	703	138	146	670	237
Arrive On Green	0.07	0.07	0.07	0.22	0.22	0.22	0.56	0.56	0.56	0.18	0.18	0.18
Sat Flow, veh/h	413	937	339	278	985	463	175	1260	248	104	1200	425
Grp Volume(v), veh/h	229	0	0	291	0	0	285	0	0	590	0	0
Grp Sat Flow(s),veh/h/ln	1688	0	0	1726	0	0	1683	0	0	1728	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	6.8	0.0	0.0	3.7	0.0	0.0	13.8	0.0	0.0
Prop In Lane	0.33		0.20	0.22		0.27	0.17		0.15	0.10		0.25
Lane Grp Cap(c), veh/h	481	0	0	481	0	0	1033	0	0	1053	0	0
V/C Ratio(X)	0.48	0.00	0.00	0.61	0.00	0.00	0.28	0.00	0.00	0.56	0.00	0.00
Avail Cap(c_a), veh/h	750	0	0	767	0	0	1033	0	0	1053	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.46	0.00	0.00
Uniform Delay (d), s/veh	18.8	0.0	0.0	16.3	0.0	0.0	5.2	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.2	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(85%),veh/ln	3.9	0.0	0.0	4.2	0.0	0.0	1.9	0.0	0.0	8.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	0.0	17.5	0.0	0.0	5.9	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h		229			291			285			590	
Approach Delay, s/veh		19.5			17.5			5.9			14.7	
Approach LOS		B			B			A			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		30.0		15.0		30.0		15.0				
Change Period (Y+Rc), s		* 4.9		* 5		* 4.9		* 5				
Max Green Setting (Gmax), s		* 17		* 18		* 17		* 18				
Max Q Clear Time (g_c+I1), s		5.7		7.6		15.8		8.8				
Green Ext Time (p_c), s		1.4		0.9		0.5		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Notes

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

Appendix D

VMT Analysis Worksheets

CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

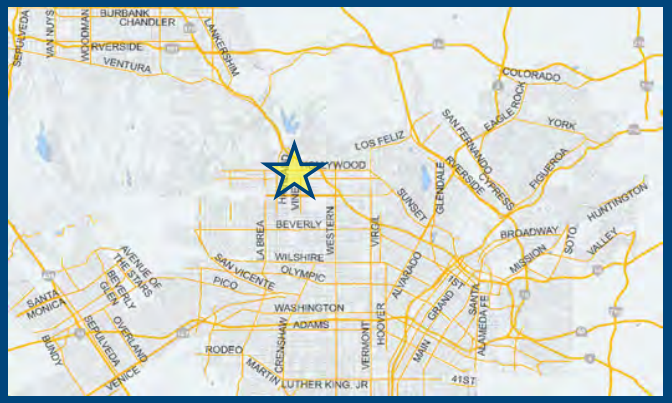
Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: 6360 Hollywood MXD

Scenario:

Address: 6360 W HOLLYWOOD BLVD, 90028



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

○ Yes ○ No

Existing Land Use

Land Use Type	Value	Unit
Housing | Single Family		DU

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

Proposed Project Land Use

Land Use Type	Value	Unit
Retail | High-Turnover Sit-Down Restaurant	11	ksf
Housing | Hotel	90	Rooms
Retail | High-Turnover Sit-Down Restaurant	11	ksf

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

Project Screening Summary

Existing Land Use	Proposed Project
0 Daily Vehicle Trips	977 Daily Vehicle Trips
0 Daily VMT	6,396 Daily VMT

Tier 1 Screening Criteria

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

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	977 Net Daily Trips
The net increase in daily VMT ≤ 0	6,396 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	11.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

12/16/2019

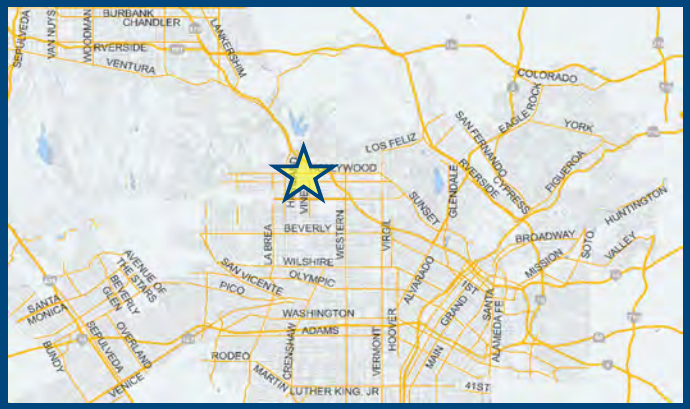
CITY OF LOS ANGELES VMT CALCULATOR Version 1.2

Project Information

Project: 6360 Hollywood MXD

Scenario:

Address: 6360 W HOLLYWOOD BLVD, 90028



Proposed Project Land Use Type	Value	Unit
Housing | Hotel	90	Rooms
Retail | High-Turnover Sit-Down Restaurant	11	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
- **B** Transit
- **C** Education & Encouragement
- **D** Commute Trip Reductions
- **E** Shared Mobility
- **F** Bicycle Infrastructure
- **G** Neighborhood Enhancement

Traffic Calming Improvements

☐ Proposed Prj ☐ Mitigation

25 percent of streets within project with traffic calming improvements

100 percent of intersections within project with traffic calming improvements

Pedestrian Network Improvements

☑ Proposed Prj ☐ Mitigation

within project and connecting off-site

Analysis Results

Proposed Project	With Mitigation
951 Daily Vehicle Trips	**951** Daily Vehicle Trips
6,230 Daily VMT	**6,230** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
6.3 Work VMT per Employee	**6.3** Work VMT per Employee

Significant VMT Impact?

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

Measuring the Miles

12/16/2019

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: December 16, 2019
Project Name: 6360 Hollywood MXD
Project Scenario:
Project Address: 6360 W HOLLYWOOD BLVD, 90028

Version 1.2

Project Information			
Land Use Type		**Value**	**Units**
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	90	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	11.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	*General Office*	*0.000*	*ksf*
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: December 16, 2019
Project Name: 6360 Hollywood MXD
Project Scenario:
Project Address: 6360 W HOLLYWOOD BLVD, 90028

Version 1.2

Analysis Results			
Total Employees: 89 Total Population: 0			
Proposed Project		***With Mitigation***	
951	**Daily Vehicle Trips**	**951**	**Daily Vehicle Trips**
6,230	**Daily VMT**	**6,230**	**Daily VMT**
0	**Household VMT per Capita**	**0**	**Household VMT per Capita**
6.3	**Work VMT per Employee**	**6.3**	**Work VMT per Employee**

Significant VMT Impact?			
APC: Central			
Impact Threshold: 15% Below APC Average Household = 6.0 Work = 7.6			
Proposed Project		***With Mitigation***	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 7.6	No	Work > 7.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$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)	within project and connecting off-site	within project and connecting off-site

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: December 16, 2019
Project Name: 6360 Hollywood MXD
Project Scenario:
Project Address: 6360 W HOLLYWOOD BLVD, 90028

Version 1.2

TDM Adjustments by Trip Purpose & Strategy

Place type: Urban

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	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 sections 1 - 2
	Pedestrian network improvements	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*
MAX. TDM EFFECT	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*	*3%*

= 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: December 16, 2019
Project Name: 6360 Hollywood MXD
Project Scenario:
Project Address: 6360 W HOLLYWOOD BLVD, 90028

Version 1.2

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	0	0.0%	0	7.8	0	0
Home Based Other Production	0	0.0%	0	5.1	0	0
Non-Home Based Other Production	271	-15.5%	229	7.4	2,005	1,695
Home-Based Work Attraction	129	-46.5%	69	8.4	1,084	580
Home-Based Other Attraction	1,004	-55.2%	450	5.9	5,924	2,655
Non-Home Based Other Attraction	271	-15.5%	229	6.4	1,734	1,466

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	-2.6%	0	0	-2.6%	0	0
Home Based Other Production	-2.6%	0	0	-2.6%	0	0
Non-Home Based Other Production	-2.6%	223	1,651	-2.6%	223	1,651
Home-Based Work Attraction	-2.6%	67	565	-2.6%	67	565
Home-Based Other Attraction	-2.6%	438	2,586	-2.6%	438	2,586
Non-Home Based Other Attraction	-2.6%	223	1,428	-2.6%	223	1,428

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 89
APC: Central

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**565**	**565**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**6.3**	**6.3**