

# TRAFFIC IMPACT STUDY FOR THE 7617 SANTA MONICA BOULEVARD PROJECT

WEST HOLLYWOOD, CALIFORNIA

JANUARY 2019

PREPARED FOR

**CITY OF WEST HOLLYWOOD** 

PREPARED BY



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January 2019

Prepared for:

**CITY OF WEST HOLLYWOOD** 

Prepared by:

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Ref: J1643

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# Chapter 1 Introduction

The transportation analysis described in this study has been prepared for the 7617 Santa Monica Boulevard Mixed-Use Project (Project). The report identifies the assumptions, describes the methodologies, and summarizes the findings of the study. The methodology and assumptions used in this analysis were established in conjunction with the City of West Hollywood (City).

#### PROJECT LOCATION

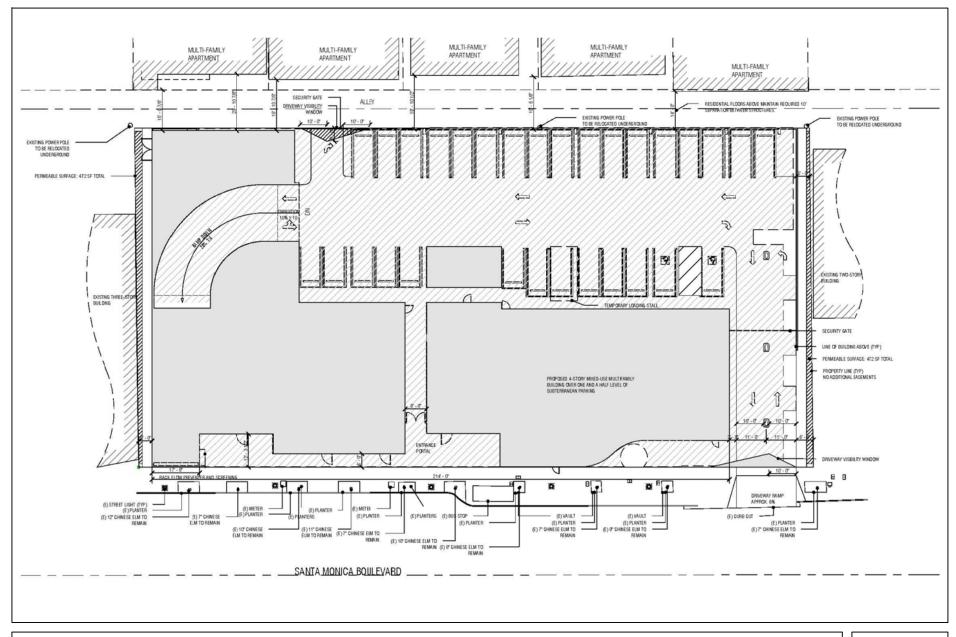
The Project, at 7617 Santa Monica Boulevard (Project Site), is bound by an alley to the north, retail uses to the east, Santa Monica Boulevard to the south, and the Los Angeles County Fire Station 8 to the west. Access to the Project Site is currently provided via driveways located along Santa Monica Boulevard and the alley to the north. The Project Site lies within an urbanized area consisting of residential and commercial uses.

#### PROJECT DESCRIPTION

The Project includes the construction of a four-story mixed-use development that consists of 71 apartment units, including 11 affordable units, and approximately 9,240 square feet (sf) of ground floor commercial space, including retail and restaurant uses. Parking for the Project would be provided on-site within a three-level parking garage. The existing 4,910 sf car wash would be removed as part of the Project.

Figure 1 illustrates the site plan of the proposed Project.





PROJECT SITE PLAN

FIGURE 1

#### **Site Access and Circulation**

Vehicular access to the Project Site would be provided via new driveways on Santa Monica Boulevard and along the alley. The driveway located on Santa Monica Boulevard would accommodate both left and right-turn ingress and right-turn-only egress movements, and the driveway located along the alley would accommodate right-turn-only egress movements. It should be noted that Spaulding Avenue is closed daily between Santa Monica Boulevard and the alley, west of the Project Site, during the morning peak period for exclusive use by the adjacent fire station.

#### STUDY SCOPE AND METHODOLOGY

This traffic impact study has been prepared in accordance with City guidelines, adopted policies, procedures, and standards, and provides a comprehensive analysis of the potential traffic impacts associated with the Project. The scope for the transportation analysis was developed in consultation with the City, in coordination with adjacent jurisdictions, and in consideration of input received during the public scoping process. The assumptions and technical methodologies were identified as part of the study approach, which was reviewed and approved by the City, and is provided in Appendix A.

As described in more detail below, the study analyzed the potential Project-generated traffic impacts on the street system surrounding the Project Site as compared to Existing Conditions (Year 2018) and Future Conditions (Year 2022). Intersection traffic impacts for the Project were evaluated for typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak periods. A total of eight signalized intersections, one unsignalized intersection, and one street segment in the vicinity of the Project Site were selected for detailed traffic analysis. The analysis of future year traffic forecasts was conducted for full buildout of the Project and is based on projected conditions in Year 2022 both with and without the addition of the Project's traffic.

Accordingly, the following traffic scenarios were developed and analyzed as part of this study:

- Existing Conditions (Year 2018) The analysis of existing traffic conditions provides a basis for the assessment of existing and future traffic conditions with the addition of Project traffic. The Existing Conditions analysis includes a description of key area streets and highways, traffic volumes and current operating conditions, and transit service in the Project Site vicinity. The Existing Conditions in this traffic study reflect conditions at the time the Notice of Preparation (NOP) was issued in August 2018. Intersection turning movement counts for typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) peak periods and fieldwork (lane configurations and signal phasing) for the analyzed intersections were collected in September 2018.
- <u>Existing with Project Conditions (Year 2018)</u> This scenario projects the potential intersection operating conditions that could be expected if the Project were built given the existing street system and traffic volumes. In this scenario, the Project-generated traffic is added to the Existing Conditions (Year 2018) traffic volumes.
- <u>Future without Project Conditions (Year 2022)</u> This scenario projects the potential intersection operating conditions that could be expected as a result of regional growth and related project traffic in the vicinity of the Project Site by Year 2022. This analysis provides the baseline conditions by which Project impacts are evaluated in the future at full buildout.
- <u>Future with Project Conditions (Year 2022)</u> This scenario projects the potential intersection operating conditions that could be expected if the Project were built in the projected buildout year (2022) by adding the Project traffic to the Future without Project Conditions (Year 2022) traffic volumes.

#### **Intersection Capacity Analyses**

In accordance with City policy, the intersection capacity analysis was conducted using the 2010 Highway Capacity Manual (Transportation Research Board, 2010) (HCM) signalized and unsignalized methodologies. 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 1 presents a description of the level of service (LOS) categories, which range from excellent, nearly free-flow traffic at LOS A, to stop-and-go conditions at LOS F, for both signalized and unsignalized intersections.

TABLE 1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS

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

#### Source

Highway Capacity Manual 2010, Transportation Research Board, 2010.

#### Significant Impact Criteria

The City has adopted a sliding scale for determining significant traffic impacts to intersections. The significant impact criteria are based on a minimum allowable increase in delay attributable to a project as the overall LOS of the intersection decreases:

	Conditions with ect Traffic	Project-Related Increase of Delay						
Level of Service	Intersection Delay (seconds)	(seconds)						
Signalized Intersection of Two Commercial Corridors								
D 35.1 - 55.0 ≥ 12.0								
E or F > 55.0 ≥ 8.0								
	Other Signalized Intersection							
D 35.1 - 55.0 ≥ 8.0								
E or F	> 55.0	≥ 5.0						
Fou	r-Way Stop-Contro	lled Intersection						
D	25.1 - 35.0	≥ 8.0						
E or F	> 35.0	≥ 5.0						
Unsignali	zed (Two-Way/One- Intersecti	-Way Stop-Controlled) on						
D, E or F	> 25.0	≥ 5.0						

Source: City of West Hollywood

The City has also developed a similar sliding scale to identify significant impacts on residential street segments. The criterion is based on the allowable increase in average daily traffic (ADT):

Average Daily Traffic (ADT)	Project-Related Increase in ADT
> 2,000	12%
2,001 - 3,000	10%
3,001 - 6,749	8%
≥ 6,750	6.25%

Source: City of West Hollywood

#### **Congestion Management Program Analysis**

An analysis also was conducted according to Los Angeles County (County) Congestion Management Program (CMP) guidelines. The CMP is a State-mandated program that serves as the monitoring and analytical basis for transportation funding decisions in the County made through the Regional Transportation Improvement Program and State Transportation Improvement Program processes. The CMP requires that a Traffic Impact Analysis (TIA) be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the morning or afternoon weekday peak hours and all mainline freeway monitoring locations where a project would add 150 or more trips (in either direction) during the morning or afternoon weekday peak hours. Additionally, it requires a review of potential impacts to the regional transit system.

#### **ORGANIZATION OF REPORT**

This report is divided into the following 12 chapters, including this introduction:

- Chapter 2 describes Existing Conditions, including the existing circulation system, traffic volumes, and traffic conditions in the Study Area.
- Chapter 3 presents the development of Future without Project operating conditions.
- Chapter 4 describes the procedure used to forecast Project traffic volumes and distribution through the Study Area.
- Chapter 5 presents the intersection operating conditions associated with the Existing with Project Conditions.
- Chapter 6 presents the intersection operating conditions associated with the Future with Project Conditions.
- Chapter 7 presents the street segment analysis.
- Chapter 8 presents the CMP analyses.
- Chapter 9 presents an assessment of potential impacts associated with construction traffic.
- Chapter 10 presents the analysis of the Project's proposed parking supply.
- Chapter 11 details the City's Transportation Demand Management ordinance.

• Chapter 12 summarizes the analyses and study conclusions.

The aforementioned additional analyses, as well as details of the technical analyses, are included in the appendices.

# Chapter 2 Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the transportation analysis Study Area. The Existing Conditions analysis relevant to this study includes an assessment of the existing street system, an analysis of traffic volumes and current operating conditions, and an analysis of the existing public transit service.

#### STUDY AREA

This Study Area was established in consultation with the City and by reviewing the existing intersection/corridor operations, Project peak hour vehicle trip generation, the anticipated distribution of Project vehicular trips, and the potential impacts of Project traffic.

A traffic analysis study area generally comprises those locations with the greatest potential to experience significant traffic impacts due to the project as defined by the lead agency. In the traffic engineering practice, a study area generally includes those intersections that are:

- 1. Immediately adjacent or in close proximity to the project site
- 2. In the vicinity of the project site that are documented to have current or projected future adverse operational issues
- In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at freeway ramp intersections)

The Project Study Area was designed to ensure that all potentially significantly impacted intersections, prior to any mitigation, were analyzed, and the boundary of the Study Area was extended, as necessary, to confirm that there were no significant impacts at or beyond the boundary of the Study Area by reviewing the Project traffic's travel patterns. As detailed later in this transportation study, the study intersections on the Study Area periphery are not anticipated to be significantly impacted by the Project and, thus, the analyzed locations are considered to

be adequate such that no additional significant impacts are anticipated to occur beyond the Study Area.

The intersections selected for analysis are consistent with the above criteria. The study locations were also selected based on the Project vehicle trip generation, the anticipated distribution of the Project trips, existing intersection/corridor operations, and travel routes/patterns to and from the Project. Several additional study locations were considered, however, were not selected for analysis as they did not meet the criteria listed above, since they accommodated little, if any, Project-related traffic volumes/vehicular turning movements, were located a farther distance from the Project Site, have relatively lower traffic volumes on the side street and minor approach to the intersections, and no documented existing or projected future adverse operational issues.

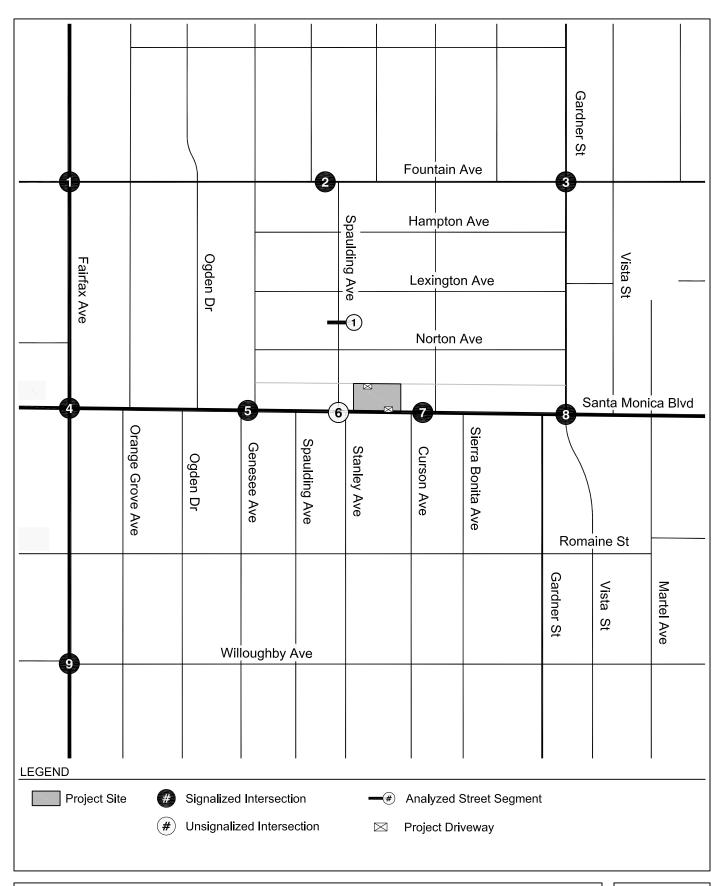
A total of nine intersections, eight signalized and one unsignalized, and one street segment in the Study Area were identified during the scoping process for detailed analysis in the transportation study. Figure 2 illustrates the location of the Project Site in relation to the surrounding street system, nine study intersections, and study street segment.

The nine intersections selected for evaluation are:

- 1. Fairfax Avenue & Fountain Avenue (signalized)
- 2. Spaulding Avenue & Fountain Avenue (signalized)
- 3. Gardner Street & Fountain Avenue (signalized)
- 4. Fairfax Avenue & Santa Monica Boulevard (signalized)
- 5. Genesee Avenue & Santa Monica Boulevard (signalized)
- 6. Spaulding Avenue & Santa Monica Boulevard (unsignalized)
- 7. Curson Avenue & Santa Monica Boulevard (signalized)
- 8. Vista Street & Santa Monica Boulevard (signalized)
- 9. Fairfax Avenue & Willoughby Avenue (signalized)

It should be noted that although it is not common practice to study stop-controlled intersections for impact purposes, Spaulding Avenue provides direct access to the alley adjacent to the Project Site and, therefore, the intersection of Spaulding Avenue & Santa Monica Boulevard was selected for inclusion in the traffic analysis.





STUDY AREA

FIGURE 2 The street segment selected for evaluation is:

1. Spaulding Avenue between Lexington Avenue and Norton Avenue

#### **EXISTING STREET SYSTEM**

The existing street system in the Study Area consists of a regional roadway system including arterials, secondary/collector and local streets. The arterials, secondary/collectors, and selected local streets in the Study Area offer sub-regional and local access and circulation opportunities. These transportation facilities generally provide two to four travel lanes and generally allow parking on either side of the street. Typically, the speed limits range between 25 and 35 miles per hour (mph) on the arterials, secondary/collector, and local streets.

#### **Roadway Descriptions**

Primary regional access to the Project Site is provided by the Hollywood Freeway (US 101), which generally runs in the northwest-southeast direction east of the Study Area, and the Santa Monica Freeway (I-10), which generally runs in the east-west direction south of the Study Area. US 101 is located approximately 2.85 miles east of the Project Site, with access provided via interchanges at Santa Monica Boulevard. I-10 is located approximately 4.0 miles to the south of the Project Site, with access provided via interchanges at Fairfax Avenue and South La Brea Avenue.

The major arterials providing regional and sub-regional access to the Project Site include Santa Monica Boulevard, Fairfax Avenue, and Fountain Avenue. The following is a brief description of the major streets in the Study Area and their classifications as defined in *West Hollywood General Plan 2035* (City of West Hollywood, 2011):

<u>Fairfax Avenue</u> – Fairfax Avenue is a designated Arterial Street. It travels in the north-south direction and is located west of the Project Site. It generally provides six travel lanes, three lanes in each direction, and left-turn lanes at most intersections. A dedicated bicycle lane is provided on both sides of the street. Two-hour unmetered and metered parking (parking permit exempt) is generally provided on both sides of the street within the Study Area.

- <u>Genesee Avenue</u> Genesee Avenue is a designated Local Street. It travels in the north-south direction and is located west of the Project Site. It generally provides two travel lanes, one lane in each direction. Within the Study Area, Genesee Avenue is off-set at Santa Monica Boulevard. Unmetered daytime parking (parking permit exempt) is generally provided on both sides of the street within the Study Area.
- Spaulding Avenue Spaulding Avenue is a designated Local Street. It travels in the north-south direction and is located west of the Project Site. It generally provides two travel lanes, one lane in each direction. Within the Study Area, Spaulding Avenue is off-set at Fountain Avenue and Santa Monica Boulevard. Unmetered daytime parking (parking permit exempt) is generally provided on both sides of the street within the Study Area.
- <u>Curson Avenue</u> Curson Avenue is a designated Local Street. It travels in the north-south direction and is located east of the Project Site. It generally provides two travel lanes, one lane in each direction, and left-turn lanes at most intersections. Within the Study Area, Curson Avenue is off-set at Santa Monica Boulevard. Unmetered and metered daytime parking (parking permit exempt) is generally provided on both sides of the street within the Study Area.
- <u>Gardner Street</u> Gardner Street is a designated Local Street. It travels in the north-south direction and is located east of the Project Site. It generally provides two travel lanes, one lane in each direction. Unmetered parking is generally provided on both sides of the street within the Study Area.
- <u>Vista Street</u> Vista Street is a designated Local Street. It travels in the north-south direction and is located east of the Project Site. It continues from Gardner Street south of Santa Monica Boulevard. Unmetered parking is generally provided on both sides of the street within the Study Area.
- Fountain Avenue Fountain Avenue is a designated Collector Street within the Study Area. It travels in the east-west direction and is located north of the Project Site. It generally provides four travel lanes, two lanes in each direction. Fountain Avenue is a "sharrowed" bicycle route within the Study Area. Unmetered parking is generally provided on the north side of the street and unmetered daytime parking with peak hour restrictions is generally provided on the south side of the street within the Study Area.
- Willoughby Avenue Willoughby Avenue is a designated Collector Street within the Study Area. It travels in the east-west direction and is located south of the Project Site. It generally provides two travel lanes, one lane in each direction. Unmetered parking is generally provided on both sides of the street within the Study Area.
- Santa Monica Boulevard Santa Monica Boulevard is a designated Arterial Street. It travels in the east-west direction and is located south of the Project Site. It provides four travel lanes, two in each direction, with left-turn lanes at intersections. Metered two-hour parking with parking prohibited on weekdays between 4:00 AM and 7:00 AM is generally provided on both sides of the street within the Study Area.

The existing lane configurations at the analyzed intersections are provided in Appendix B.

#### **EXISTING TRANSIT SYSTEM**

The Project area is served by bus lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro) and the West Hollywood Cityline service.

Bus transit service in the Project vicinity is available along the following streets:

- Fountain Avenue
- Lexington Avenue
- Santa Monica Boulevard
- Willoughby Avenue
- Fairfax Avenue
- Gardner Street
- Curson Avenue

Figure 3 illustrates the existing transit service in the Study Area. Table 2 summarizes the transit lines operating in the Study Area for each of the service providers in the region, the type of service (peak vs. off-peak, express vs. local), and frequency of service, as described above. The average frequency of transit service during the peak hour was derived from the number of peak period stops made at the stop nearest the Project Site.

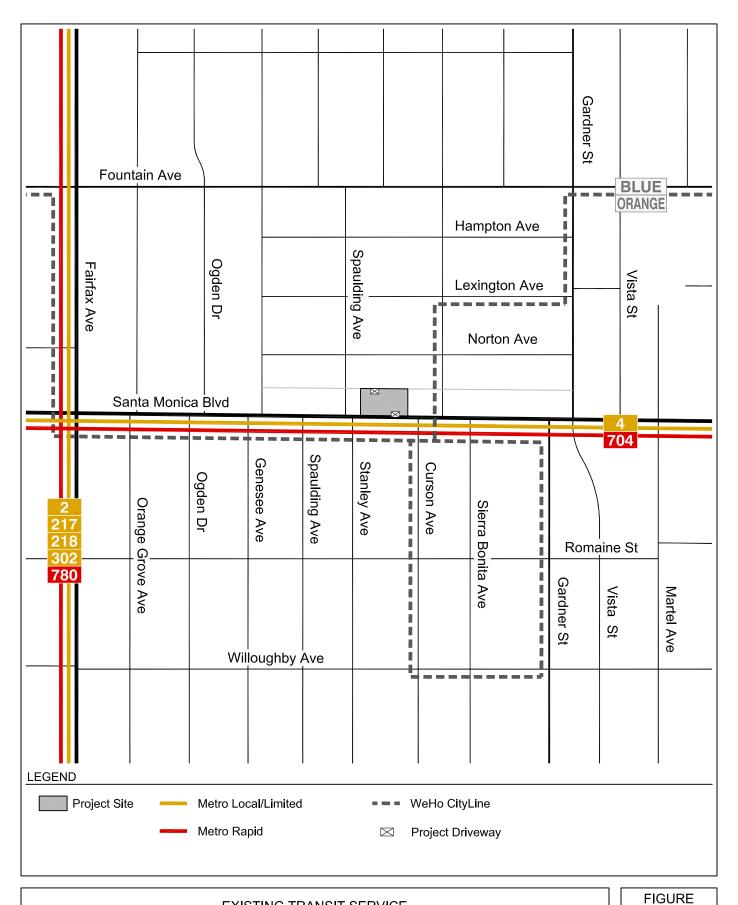
Table 3 summarizes the total residual capacity of the Metro bus lines during the morning and afternoon peak hours based on the frequency of service of each line and the maximum seated and standing capacity of each bus line. As shown in Table 3, the Metro bus lines within the Study Area currently have residual capacity for 1,974 transit trips during the morning peak hour and 1,422 transit trips during the afternoon peak hour. Furthermore, the West Hollywood CityLine bus lines would provide additional transit capacity.

#### **EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE**

This section presents the existing peak hour turning movement traffic volumes for the intersections analyzed in the study, describes the methodology used to assess the traffic

conditions at each intersection, and analyzes the resulting operating conditions at each intersection indicating delay and LOS.





EXISTING TRANSIT SERVICE

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TABLE 2 **EXISTING TRANSIT SERVICE** 

	Provider, Route, and Service Area	Service Type	Hours of Operation	Average Headway (minutes)				
	Trovider, Noute, and Service Area		Hours of Operation	AM Peak Period		PM Peak Period		
Metro				NB/EB	SB/WB	NB/EB	SB/WB	
2 / 302	Downtown Los Angeles - Westwood via Sunset Boulevard	Local / Limited	5:00 AM - 2:00 AM	13	11	11	10	
4	Downtown Los Angeles - West Los Angeles - Santa Monica via Santa Monica Boulevard	Local	24-Hour	13	13	10	13	
217	Vermont/Sunset Station - West Hollywood - Howard Hughes Center via Hollywood Boulevard, Fairfax Avenue & La Cienega Boulevard	Local / Limited	3:30 AM - 2:30 AM	8	15	10	11	
218	Studio City - Beverly Hills via Laurel Canyon Boulevard	Local / Limited	6:30 AM - 9:00 PM	30	34	34	30	
704	Downtown Los Angeles - Santa Monica Boulevard via Santa Monica Boulevard	Rapid	5:30 AM - 1:00 AM	17	11	14	16	
780	Pasadena - Washington/Fairfax via Fairfax Avenue, Hollywood Boulevard & Colorado Boulevard	Rapid	5:30 AM - 7:30 PM	13	14	14	15	
West Hollyw	rood CityLine			NB/EB	SB/WB	NB/EB	SB/WB	
Orange	Robertson BI to La Brea Ave (Eastbound)	Local	9:00 AM - 6:00 PM	60	N/A	36	N/A	
Blue	La Brea Ave to Robertson Blvd (Westbound)	Local	9:00 AM - 6:00 PM	N/A	30	N/A	36	
Х	Highland Avenue to Robertson Blvd via Santa Monica Boulevard & La Brea Avenue	Shuttle	7:00 AM - 9:30 AM 5:30 PM - 7:30 PM	9	12	36	36	

Notes
Metro: Los Angeles County Metropolitan Transportation Authority
West Hollywood Cityline Bus: City of West Hollywood
AM Peak from 6-10 AM PM Peak from 3-7 PM

#### TABLE 3 **EXISTING TRANSIT SERVICE PATRONAGE** LINES SERVING PROJECT PERIPHERY

				AM Peak Hou	ir					
Peak Hour Ridership Average Residual Capacity								Average Resi	Average Residual Capacity	
Provider, Route, and Stop Location		Capacity per Trip [b]	Peak Load		Average Load [c]		per Trip		in Peak Hour [d]	
		per mp [b]	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro										
2 - 302	Sunset Boulevard at Stanley Avenue	50	17	39	9	28	41	22	194	121
4	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue	50	15	35	10	28	40	22	190	104
217	Fairfax Avenue at Santa Monica Boulevard	50	19	27	11	19	39	31	146	124
218	Fairfax Avenue at Santa Monica Boulevard	50	14	9	10	7	40	43	80	75
780	San Vicente Boulevard at Sunset Boulevard	75	22	54	13	38	62	37	217	194
704	Santa Monica Boulevard at San Vicente Boulevard	75	17	37	10	23	65	52	308	221
WeHo CityLine	9									
Blue -	Santa Monica Boulevard at									
Orange	Stanley Avenue	21				No Data	Available			
			Total Residual Capacity in Peak Hour						1,135	839
				PM Peak Hou	ır					
		Capacity	Peak Hour Ridership		Average Residual Capacity		Average Residual Capacity			
Provider, Rout	te, and Stop Location	per Trip [b]	Peak Load		Average Load [c]		per Trip		in Peak	Hour [d]
			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Metro										
2 - 302	Sunset Boulevard at	50	35							
	Stanley Avenue	50	35	23	27	15	23	35	126	218
4	Stanley Avenue  Santa Monica Boulevard at  Spaulding Avenue/Curson Avenue	50	35	23 26	27 27	15 17	23	35 33	126 132	218 156
217	Santa Monica Boulevard at									
	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue Fairfax Avenue at	50	37	26	27	17	23	33	132	156
217	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue Fairfax Avenue at Santa Monica Boulevard Fairfax Avenue at	50	37	26	27 24	17	23	33	132	156 140
217 218	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue Fairfax Avenue at Santa Monica Boulevard Fairfax Avenue at Santa Monica Boulevard San Vicente Boulevard at	50 50 50	37 38 13	26 22 8	27 24 12	17 17 7	23 26 38	33 33 43	132 117 66	156 140 86
217 218 780	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue Fairfax Avenue at Santa Monica Boulevard Fairfax Avenue at Santa Monica Boulevard San Vicente Boulevard at Sunset Boulevard Santa Monica Boulevard at Santa Monica Boulevard	50 50 50 50	37 38 13 57	26 22 8 35	27 24 12 36	17 17 7 24	23 26 38 14	33 33 43 26	132 117 66 59	156 140 86 97
217 218 780 704	Santa Monica Boulevard at Spaulding Avenue/Curson Avenue Fairfax Avenue at Santa Monica Boulevard Fairfax Avenue at Santa Monica Boulevard San Vicente Boulevard at Sunset Boulevard Santa Monica Boulevard at Santa Monica Boulevard	50 50 50 50	37 38 13 57	26 22 8 35	27 24 12 36	17 17 7 24 16	23 26 38 14	33 33 43 26	132 117 66 59	156 140 86 97

- [a] Number of runs in both directions combined during peak hour.
- [b] Capacity assumptions based on discussions with agencies: Metro Regular Bus 40 seated / 50 seated and standing.

Metro Articulated Bus - 66 seated / 75 seated and standing standing.
West Hollywood CityLine Bus - 21 seated only

- [c] Maximum Load is the maximum number of people per bus in the peak direction.
- [d] Maximum residual capacity in peak hours = (Maximum residual capacity per run) x (number of peak hour runs).

  Metro: Los Angeles County Metropolitan Transportation Authority.

#### **Existing Traffic Volumes**

Intersection turning movement counts during the typical weekday morning (7:00 AM to 9:00 AM) and afternoon (4:00 PM to 6:00 PM) commuter peak periods were conducted at the nine study intersections on September 11, 2018. Local schools were in session at the time the traffic counts were conducted. The Existing Conditions traffic volumes illustrated in Figure 4 represent conditions at the issuance of the Project's NOP. The summary data worksheets of turning movement counts at the study intersections are available in Appendix C.

The traffic volumes illustrated in Figure 4 were analyzed to determine the existing operating conditions at the analyzed intersections.

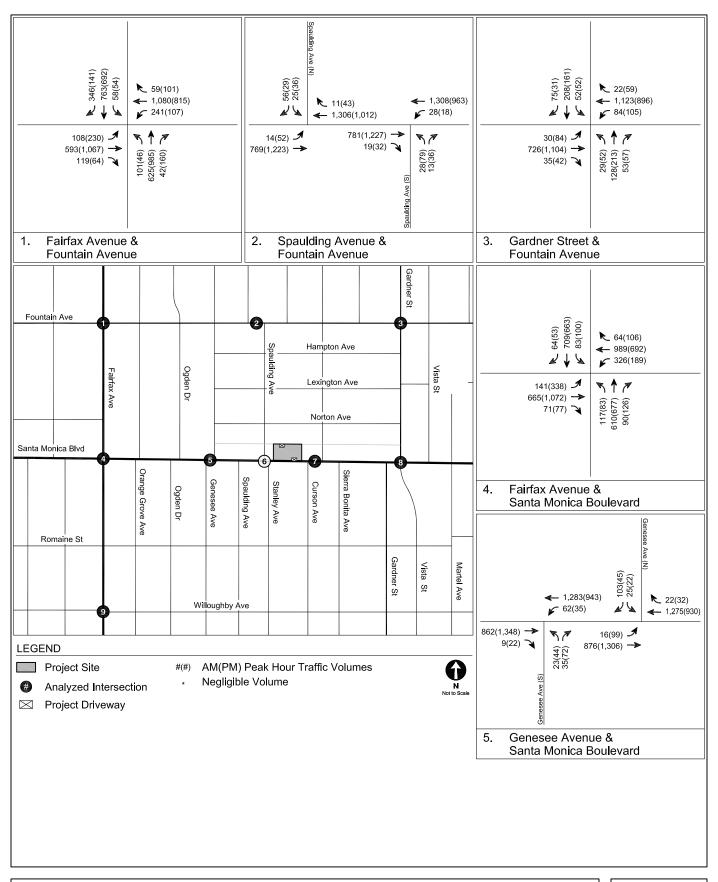
#### **Existing Intersection Levels of Service**

Table 4 summarizes the existing weekday morning and afternoon peak hour delay and the corresponding LOS for each of the study intersections.

As previously noted, Spaulding Avenue is closed daily between Santa Monica Boulevard and the alley during the morning peak period for exclusive use by the adjacent fire station. Thus, turning movements at the intersection of Spaulding Avenue & Santa Monica Boulevard would be limited and any delay experienced on Santa Monica Boulevard during the morning peak hour would be minimal. As shown in Table 4, eight of the nine study intersections operate at LOS D or better during both the morning and afternoon peak hours under Existing Conditions. The remaining intersection of Fairfax Avenue & Santa Monica Boulevard (Intersection #4) operates at LOS D during the morning peak hour and LOS E during the afternoon peak hour.

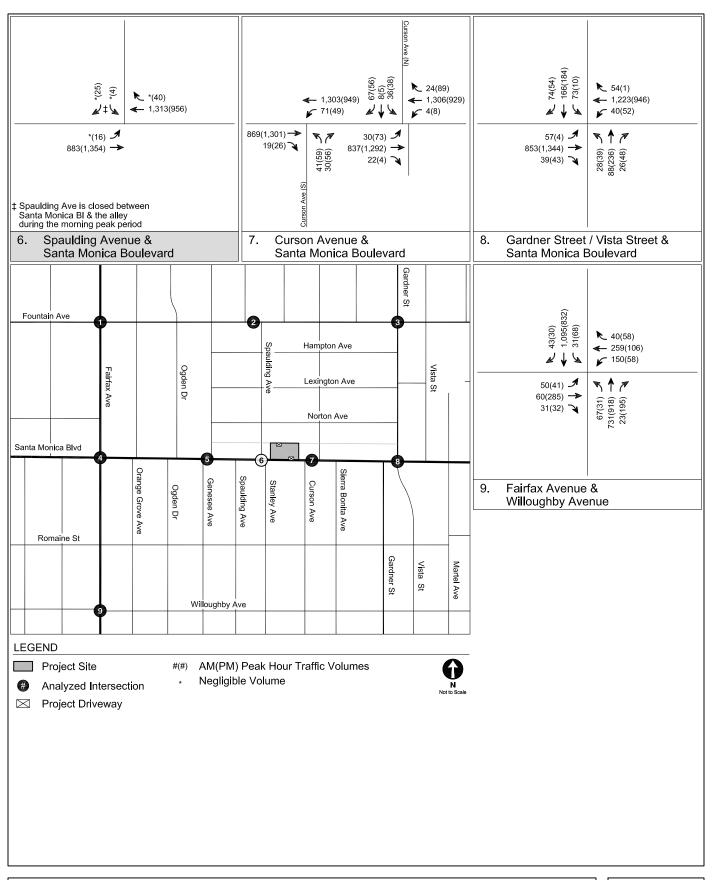
The LOS calculation worksheets are provided in Appendix D.





EXISTING CONDITIONS (YEAR 2018) PEAK HOUR TRAFFIC VOLUMES FIGURE 4





EXISTING CONDITIONS (YEAR 2018) PEAK HOUR TRAFFIC VOLUMES FIGURE 4 (CONT.)

# TABLE 4 EXISTING CONDITIONS (YEAR 2018) INTERSECTION PEAK HOUR LEVELS OF SERVICE

N.	luta na asti a n	De als Hassa	Existing			
No	Intersection Peak Hour		Delay (sec)	LOS		
1.	Fairfax Avenue &	A.M.	50.1	D		
[a]	Fountain Avenue	P.M.	50.7	D		
2a.	Spaulding Avenue (S) &	A.M.	3.9	Α		
[a]	Fountain Avenue	P.M.	4.5	Α		
2b.	Spaulding Avenue (N) &	A.M.	3.3	Α		
[a]	Fountain Avenue	P.M.	5.7	Α		
3.	Gardner Street &	A.M.	17.1	В		
[a]	Fountain Avenue	P.M.	18.3	В		
4.	Fairfax Avenue &	A.M.	48.4	D		
[a]	Santa Monica Boulevard	P.M.	56.5	E		
5a.	Genesee Avenue (N) &	A.M.	5.6	Α		
[a]	Santa Monica Boulevard	P.M.	3.6	Α		
5b.	Genesee Avenue (S) &	A.M.	3.5	Α		
[a]	Santa Monica Boulevard	P.M.	5.5	Α		
6.	Spaulding Avenue &	A.M. [c]	N/A	N/A		
[b]	Santa Monica Boulevard	P.M.	20.9	С		
7a.	Curson Avenue (N) &	A.M.	4.2	Α		
[a]	Santa Monica Boulevard	P.M.	3.9	Α		
7b.	Curson Avenue (S) &	A.M.	3.3	Α		
[a]	Santa Monica Boulevard	P.M.	5.2	Α		
8.	Gardner Street/Vista Street &	A.M.	12.8	В		
[a]	Santa Monica Boulevard	P.M.	15.0	В		
9.	Fairfax Avenue &	A.M.	23.5	С		
[a]	Willoughby Avenue	P.M.	20.6	С		

#### Notes

- [a] Signalized location analyzed with HCM Signalized methodology.
- [b] Unsignalized location analyzed with HCM Unsignalized methodology.
- [c] Spaulding Avenue is closed for fire department use only between the alley and Santa Monica Boulevard during the morning peak period. Therefore, turning movements at the intersection are limited during the morning peak hour. Thus, delay along Santa Monica Boulevard during the morning peak hour is considered to be minimal.

### Chapter 3

### **Future without Project Conditions**

In accordance with California Environmental Quality Act (CEQA) requirements, the Project's TIA considers the effects of the Project in relation to other developments either proposed, approved, or under construction in the Study Area. These development proposals and the methodologies used in projecting future cumulative traffic conditions without the Project are discussed in this section. The Future Year 2022 roadway network conditions are also discussed in this chapter in terms of anticipated supply, demand, and operations (system performance). The analyzed Year 2022 was selected to coincide with the projected full buildout of the Project.

#### **FUTURE WITHOUT PROJECT TRAFFIC PROJECTIONS**

The Future without Project traffic projections reflect growth in traffic over Existing Conditions from two sources. The first source is the ambient growth in traffic, which reflects increases in traffic due to regional growth and development outside the Study Area. The second source is growth due to traffic generated by projects which are proposed, approved, or under construction within and in the vicinity of the Study Area (collectively, the Related Projects).

#### **AMBIENT TRAFFIC GROWTH**

Existing traffic is expected to increase as a result of regional growth and development. Based on historic trends, an ambient growth factor of 1.0% per year was used to adjust the existing traffic volumes to reflect the effects of regional growth and development by the Year 2022. The total adjustment applied over the four-year period to full buildout of the Project (Year 2022) was, therefore, 4.0%.

#### **RELATED PROJECTS**

In accordance with CEQA requirements, this transportation study considered the effects of the Project in relation to other developments either proposed, approved, or under construction in the Study Area and expected to be implemented prior to the buildout date of the Project. Information about Related Projects was obtained from the Cities of West Hollywood, Beverly Hills, and Los Angeles, as well as from recent published reports for other developments. 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 Traffic Impact Study and conservatively assumed to be completed by the Project buildout year of 2022. A summary of the Related Projects information is provided in Appendix E.

The trips associated with these Related Projects have been accounted for in the future traffic forecasts through the following three-step process.

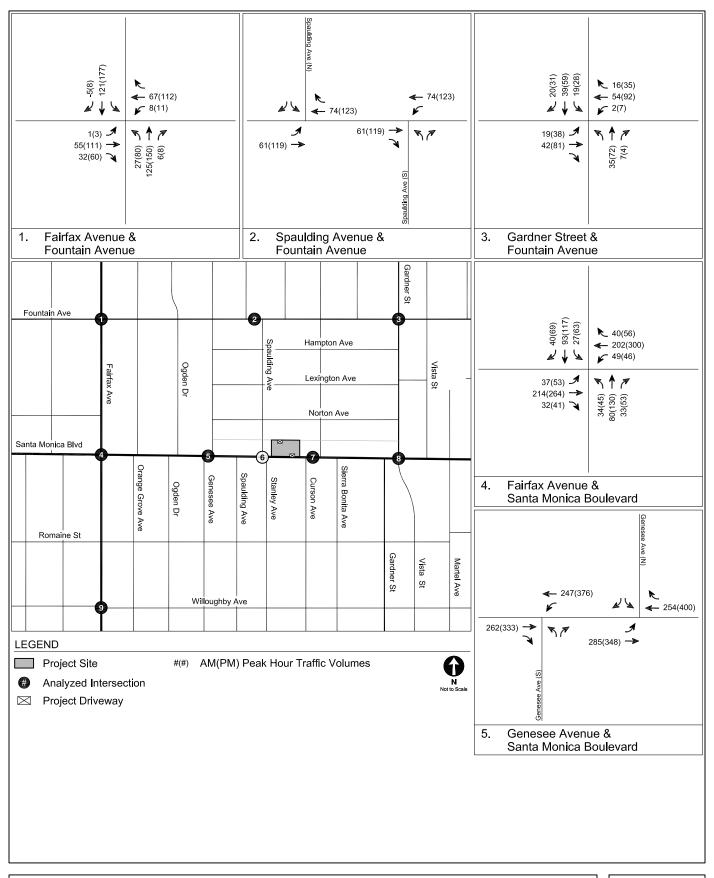
**Trip Generation.** Trip generation estimates for the Related Projects were either provided by the respective city or calculated using a combination of previous study findings and the trip generation rates contained in *Trip Generation*, *10<sup>th</sup> Edition* (Institute of Transportation Engineers, 2017). The calculated Related Project trip generation estimates provided in Appendix E are conservative in that they may not in every case provide credit for either the existing uses to be removed or the likely use of non-motorized travel modes (mass transit, bicycling, walking, etc.)

<u>Trip Distribution</u>. 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 residents and potential patrons of the Related Projects are drawn, and the location of these projects in relation to the surrounding street system.

**Trip Assignment.** The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above and illustrated in Figure 5. These volumes were then added to the existing traffic volumes after adjustment for ambient

growth through the assumed buildout year of 2022. The resulting Future without Project intersection traffic volumes are illustrated in Figure 6.

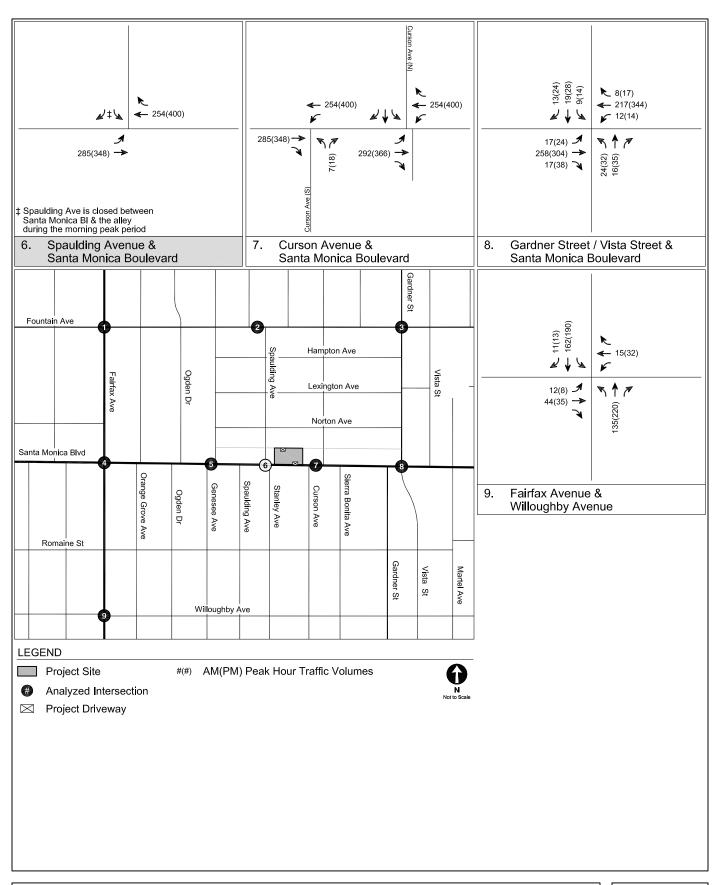




RELATED PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 5

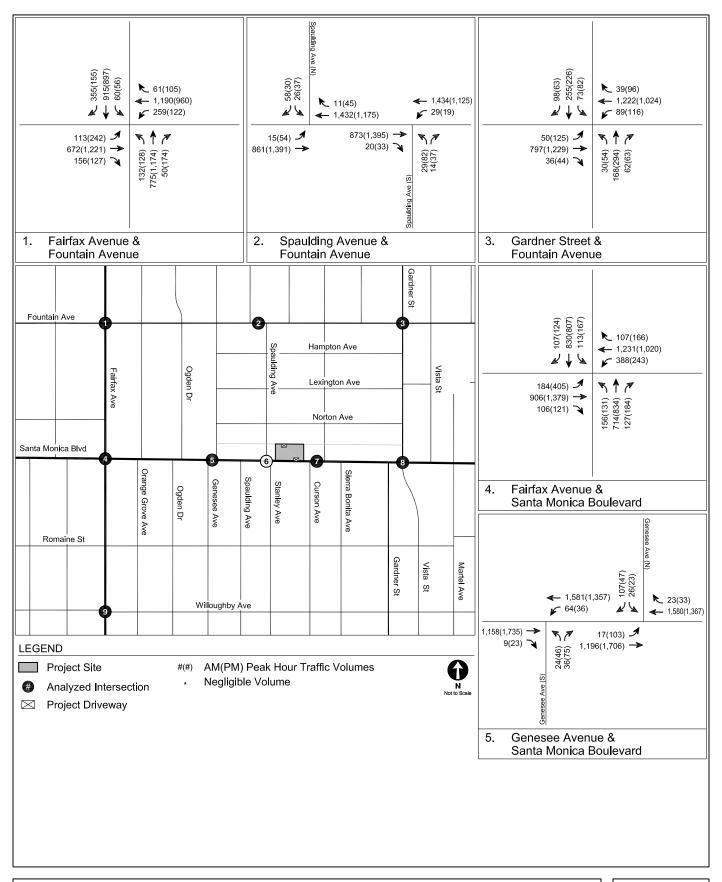




RELATED PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 5 (CONT.)

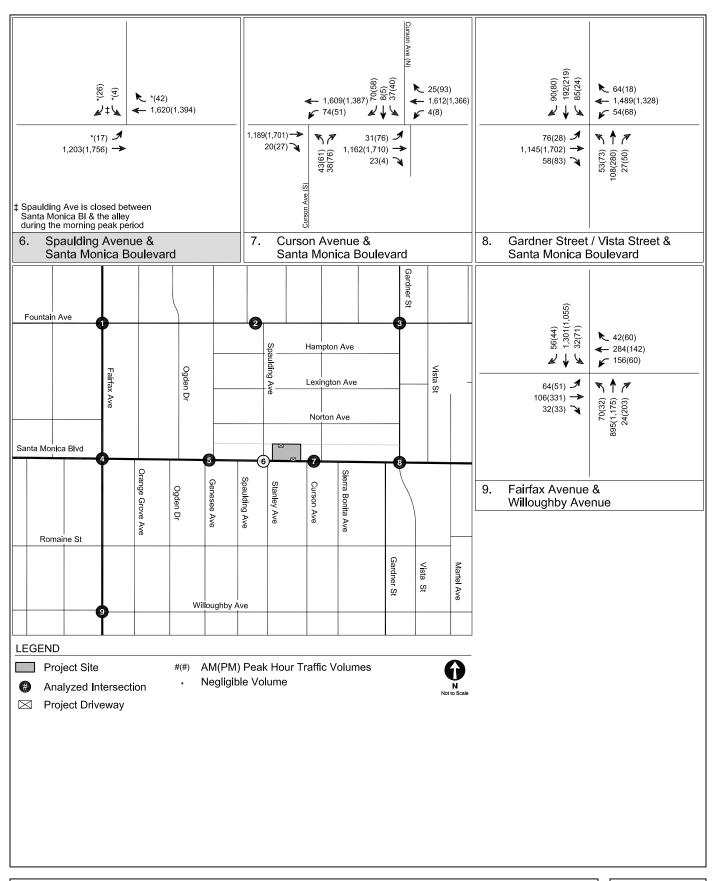




FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2022)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 6





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

FIGURE 6 (CONT.)

#### **INTERSECTION OPERATIONS**

This section presents the methodology and results of the intersection operations for the Future without Project Conditions that are defined by the traffic volumes, intersection lane configurations, and roadways that would exist in Year 2022.

The projected Future without Project intersection operating conditions for the weekday morning and afternoon peak hours are shown in Table 5. For the purposes of this transportation study, it was assumed that Spaulding Avenue would continue to be closed daily between Santa Monica Boulevard and the alley during the morning peak period for exclusive fire station use. Therefore, turning movements at the intersection of Spaulding Avenue & Santa Monica Boulevard are limited. As such, Santa Monica Boulevard is assumed to continue to operate with minimal delay during the morning peak hour. As shown, four of the nine study intersections are projected to operate at LOS D or better during both the morning and afternoon peak hours. The remaining five intersections are projected to operate at LOS E or F during at least one of the analyzed peak hours.

# TABLE 5 FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2022) INTERSECTION PEAK HOUR LEVELS OF SERVICE

Na	luta una addia u	De als Hassa	Future		
No	Intersection	Peak Hour	Delay (sec)	LOS	
1.	Fairfax Avenue &	A.M.	84.2	F	
[a]	Fountain Avenue	P.M.	106.0	F	
2a.	Spaulding Avenue (S) &	A.M.	4.4	Α	
[a]	Fountain Avenue	P.M.	4.8	Α	
2b.	Spaulding Avenue (N) &	A.M.	3.4	Α	
[a]	Fountain Avenue	P.M.	7.4	Α	
3.	Gardner Street &	A.M.	48.3	D	
[a]	Fountain Avenue	P.M.	110.0	F	
4.	Fairfax Avenue &	A.M.	113.4	F	
[a]	Santa Monica Boulevard	P.M.	158.1	F	
5a.	Genesee Avenue (N) &	A.M.	6.9	Α	
[a]	Santa Monica Boulevard	P.M.	5.3	Α	
5b.	Genesee Avenue (S) &	A.M.	4.4	Α	
[a]	Santa Monica Boulevard	P.M.	7.7	Α	
6.	Spaulding Avenue &	A.M. [c]	N/A	N/A	
[b]	Santa Monica Boulevard	P.M.	48.5	E	
7a.	Curson Avenue (N) &	A.M.	5.0	А	
[a]	Santa Monica Boulevard	P.M.	5.2	Α	
7b.	Curson Avenue (S) &	A.M.	4.0	Α	
[a]	Santa Monica Boulevard	P.M.	7.5	Α	
8.	Gardner Street/Vista Street &	A.M.	16.5	В	
[a]	Santa Monica Boulevard	P.M.	25.6	С	
9.	Fairfax Avenue &	A.M.	57.9	Е	
[a]	Willoughby Avenue	P.M.	60.5	E	

#### Notes

- [a] Signalized location analyzed with HCM Signalized methodology.
- [b] Unsignalized location analyzed with HCM Unsignalized methodology.
- [c] Spaulding Avenue is closed for fire department use only between the alley and Santa Monica Boulevard during the morning peak period. Therefore, turning movements at the intersection are limited during the morning peak hour. Thus, delay along Santa Monica Boulevard during the morning peak hour is considered to be minimal.

# Chapter 4 Project Traffic

A trip generation estimate, trip distribution pattern and trip assignment were prepared for the Project. These components form the basis of the Project's traffic impact analysis.

#### **PROJECT TRAFFIC VOLUMES**

The first step of the forecasting process is trip generation, which estimates the total arriving and departing trips generated by the Project on a peak hour and daily basis by applying the appropriate vehicle trip generation equations, or rates, to the size of Project development. For the purposes of this Project, trips were also generated for the existing facility at the Project Site to allow for comparison with the Project.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound Project trips. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the Study Area. Localized routes of travel through the Study Area were developed based on existing traffic patterns and relative travel times on various corridors.

The third step of the forecasting process is trip assignment. This involves applying the traffic generated by the Project (the trip generation) to the intersections and street segments in the Study Area according to the projected trip distribution patterns. These traffic volumes were then added to existing or future background conditions to represent traffic volumes once the Project is complete.

With the forecasting process complete and Project traffic assignments developed, the impact of the Project was isolated by comparing operational (i.e., LOS) conditions at the study intersections using expected future traffic volumes without and with forecast Project traffic. The need for sitespecific and/or cumulative local area traffic improvements was then evaluated and the significance of the Project's impacts identified.

#### PROJECT TRIP GENERATION

As previously described, the Project includes the construction of a four-story mixed-use development that consists of 71 apartment units, including 11 affordable units, and approximately 9,240 sf of ground floor commercial space, including retail and restaurant uses. Parking for the Project would be provided on-site within a three-level parking garage. The existing 4,910 sf car wash would be removed as part of the Project.

The *Trip Generation*, 10<sup>th</sup> Edition trip generation rates for multi-family housing (low-rise), shopping center, and high-turnover restaurant uses were used to develop the Project trip generation estimates. Trip generation rates for automated car wash uses were utilized to estimate the existing trips associated that would be removed with development of the Project.

Appropriate trip generation reductions to account for shared trips between the residential and commercial uses and public transit usage were made in consultation with City staff and in accordance with *Trip Generation Handbook*, 3<sup>rd</sup> *Edition* (Institute of Transportation Engineers, 2017), which outlines the recommended procedure for estimating trip generation in a multi-use development. Based on the methodology outlined in *Trip Generation Handbook*, 3<sup>rd</sup> *Edition* and the NCHRP 8-51 Internal Trip Capture Estimation Tool (*National Cooperative Highway Research Program Report 684 – Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*, Transportation Research Board and National Research Council, 2011), a 10% internal capture credit was applied to the retail and restaurant trip generation estimates to account for the synergy of uses between the residential uses and the commercial uses (e.g., residents visiting the commercial uses). The Project Site is located adjacent to the Metro Local Line 4 bus stop and within 1,500 feet of the Metro Rapid Line 704 bus stop at Santa Monica Boulevard & Gardner Street/Vista Street; therefore, consistent with trip data in *Trip Generation Handbook*, 3<sup>rd</sup> *Edition*, a 15% transit adjustment was applied to residential uses to account for transit usage and walking trips to adjacent commercial and employment centers.

After accounting for the adjustments above and the removal of the existing uses, the Project is estimated to generate 373 daily trips, with 73 morning peak hour trips (32 inbound, 41 outbound) and 18 afternoon peak hour trips (18 inbound, 0 outbound), as shown in Table 6.

#### PROJECT TRIP DISTRIBUTION

The traffic volumes entering and exiting the Project Site for both the existing uses and the Project were distributed and assigned to the local street system based on demographics and existing/anticipated travel patterns in the Study Area. Localized routes of travel through the Study Area were developed based on existing traffic patterns and relative travel times on various corridors, the level of accessibility of the route to and from the Project Site, and the City's Travel Demand Model, which takes into account the general locations of land uses to which project trips would originate or terminate. The Project trip distribution was developed to reflect the access on Santa Monica Boulevard and the adjacent alley. The general distribution pattern was reviewed and approved by the City.

Project traffic for the residential uses was assigned to the surrounding street system based on the following general distribution pattern:

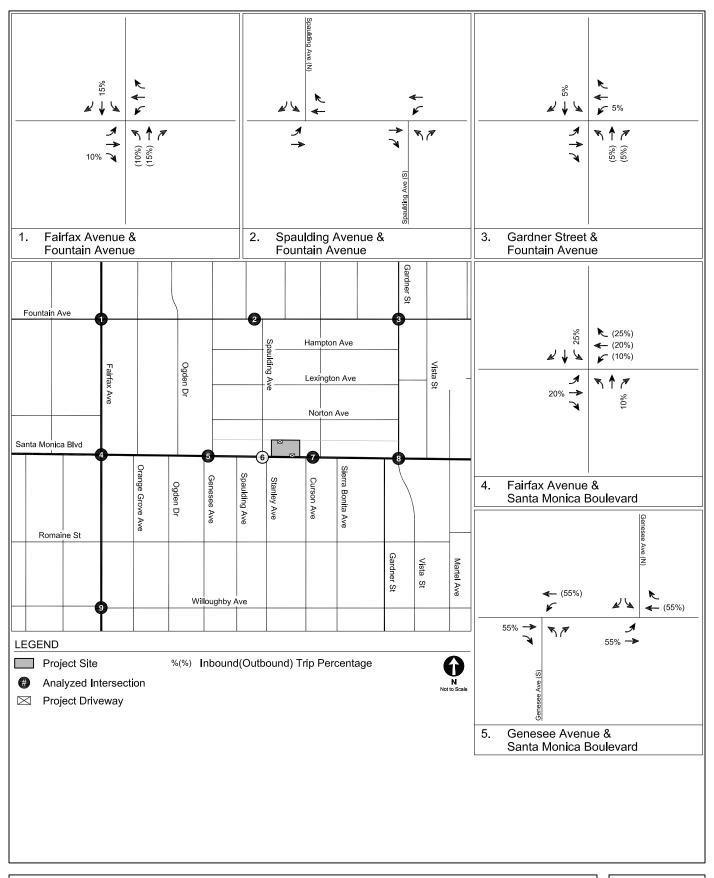
- 20% to/from the north (Fairfax Avenue, Gardner Street)
- 20% to/from the south (Fairfax Avenue, Curson Avenue, Gardner Street)
- 30% to/from the east (Fountain Avenue, Santa Monica Boulevard)
- 30% to/from the west (Fountain Avenue, Santa Monica Boulevard)

Project traffic for the commercial retail and restaurant uses was assigned to the surrounding street system based on the following general distribution pattern:

- 20% to/from the north (Fairfax Avenue, Gardner Street)
- 25% to/from the south (Fairfax Avenue, Curson Avenue, Gardner Street)
- 25% to/from the east (Fountain Avenue, Santa Monica Boulevard)
- 30% to/from the west (Fountain Avenue, Santa Monica Boulevard)

The trip distribution of the Project is illustrated in Figures 7A to 7D.

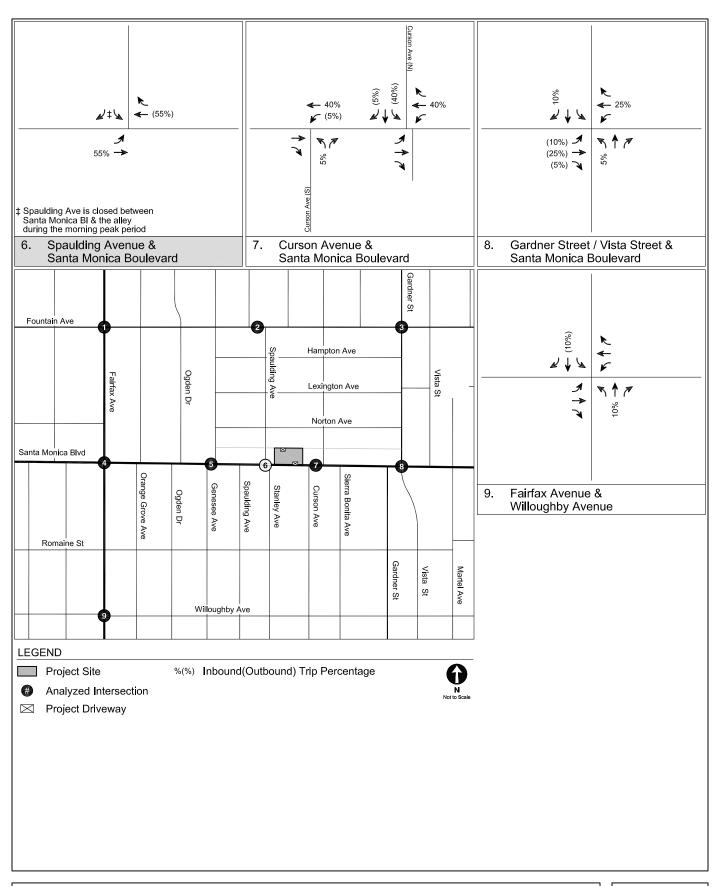




TRIP DISTRIBUTION RESIDENTIAL (MORNING PEAK HOUR)

FIGURE 7A

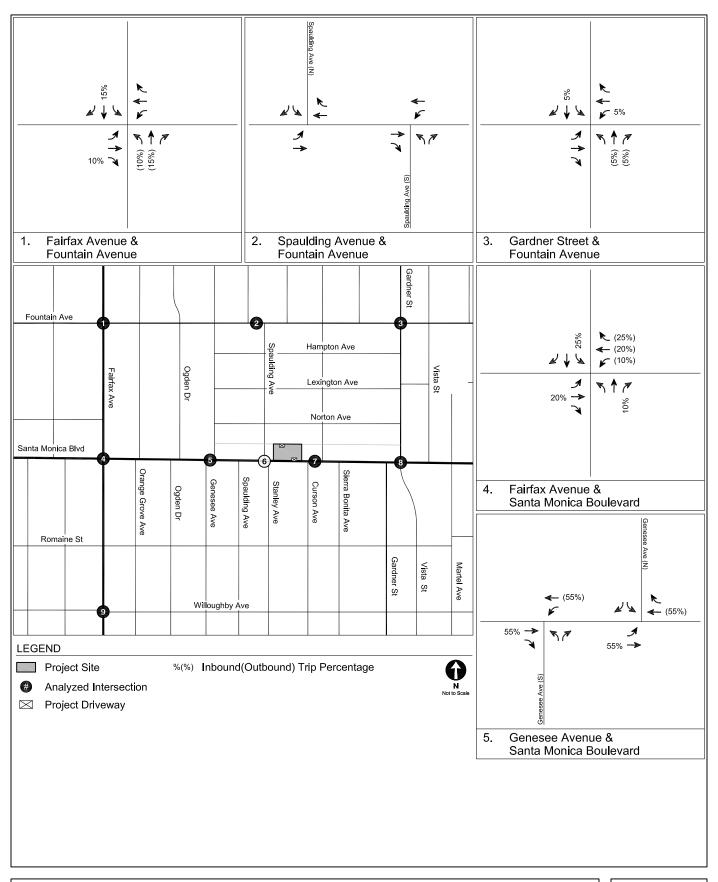




TRIP DISTRIBUTION RESIDENTIAL (MORNING PEAK HOUR)

FIGURE 7A (CONT.)

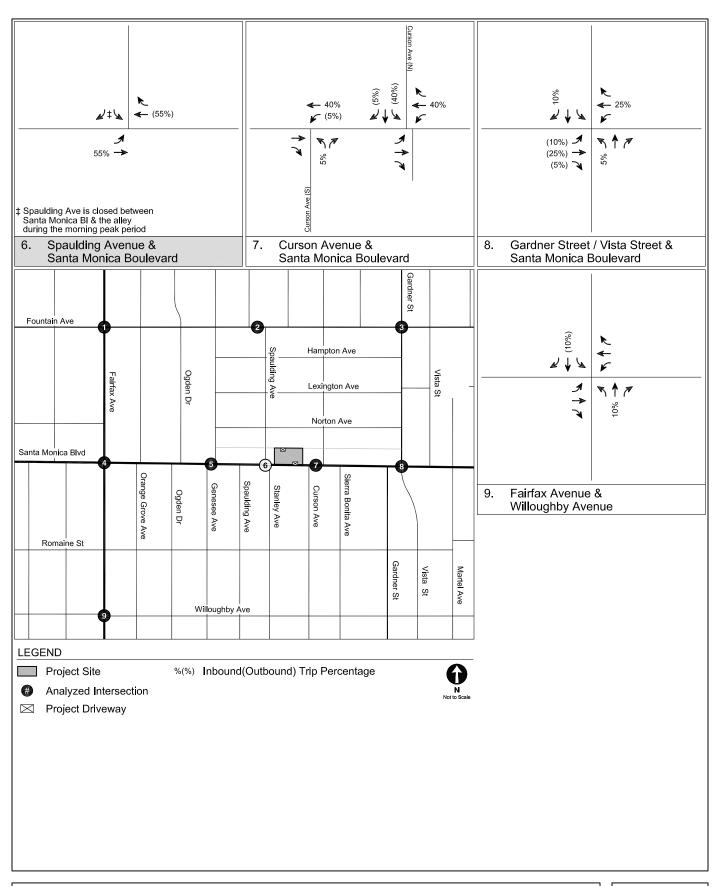




TRIP DISTRIBUTION RESIDENTIAL (AFTERNOON PEAK HOUR)

FIGURE 7B

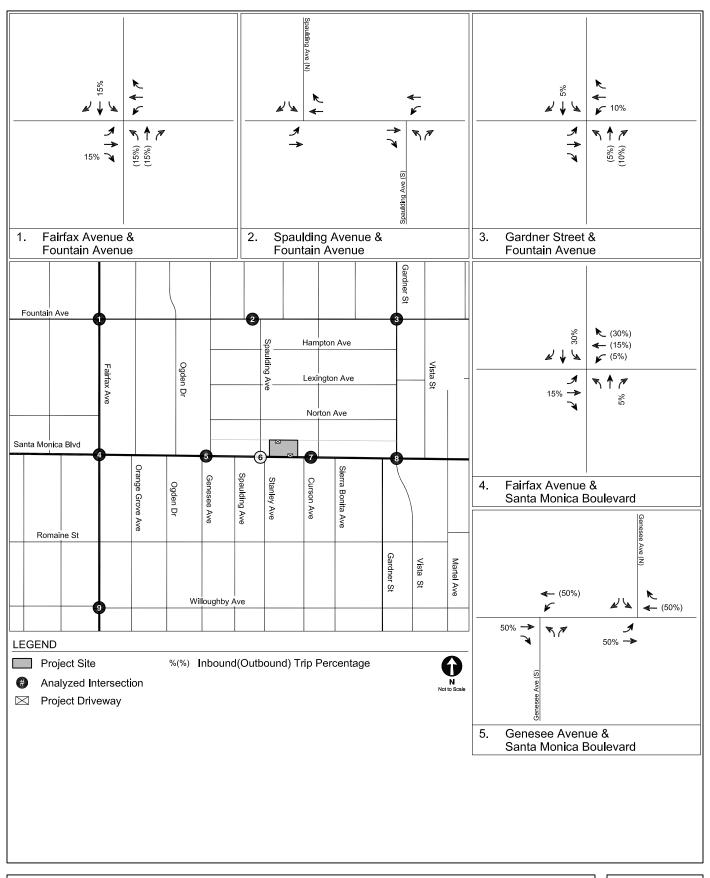




TRIP DISTRIBUTION RESIDENTIAL (AFTERNOON PEAK HOUR)

FIGURE 7B (CONT.)

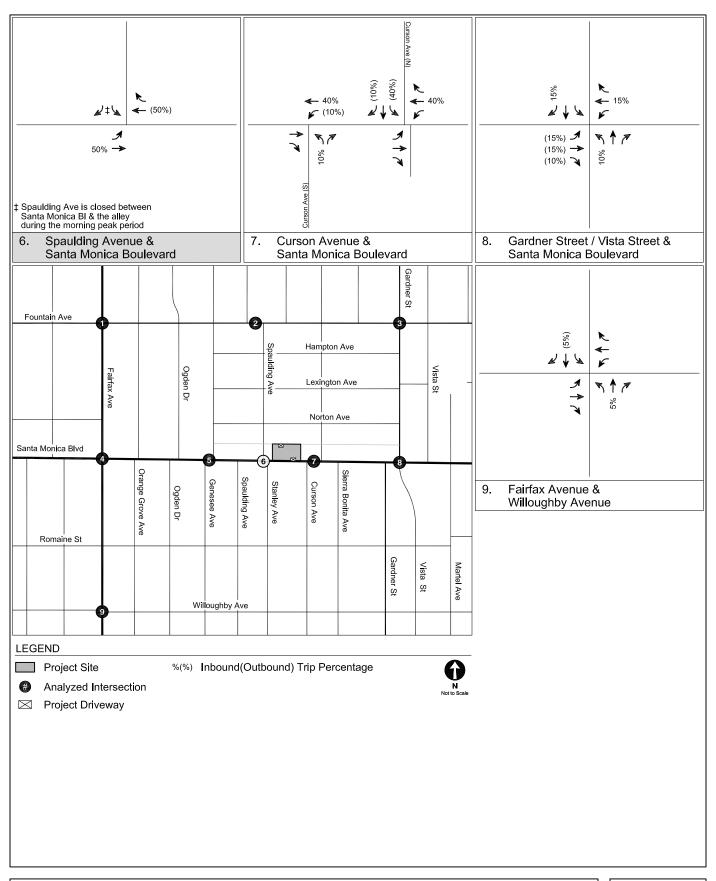




TRIP DISTRIBUTION COMMERCIAL (MORNING PEAK HOUR)

FIGURE 7C

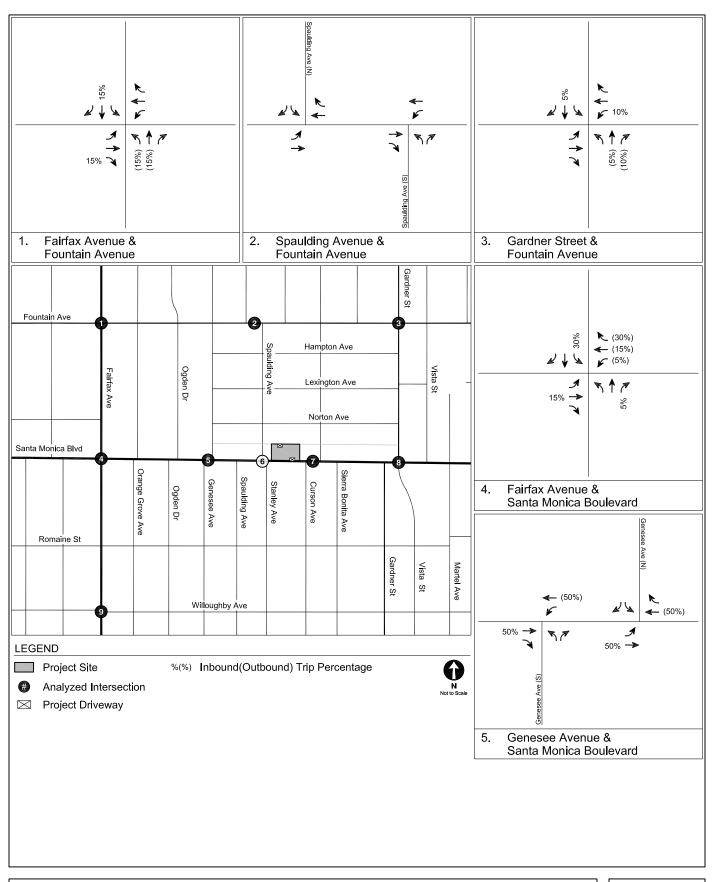




TRIP DISTRIBUTION COMMERCIAL (MORNING PEAK HOUR)

FIGURE 7C (CONT.)

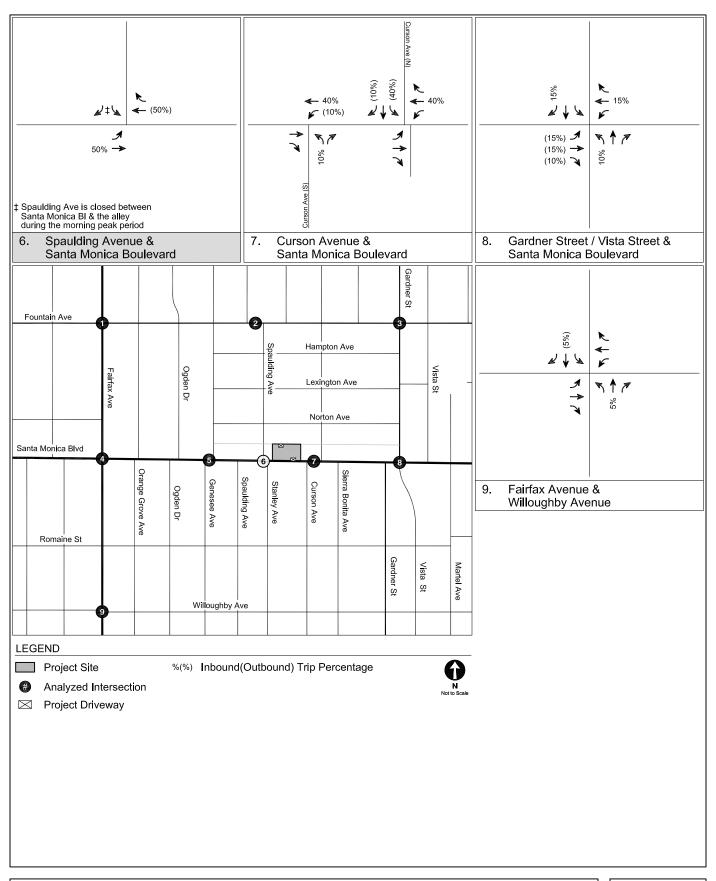




TRIP DISTRIBUTION COMMERCIAL (AFTERNOON PEAK HOUR)

FIGURE 7D





TRIP DISTRIBUTION COMMERCIAL (AFTERNOON PEAK HOUR)

FIGURE 7D (CONT.)

TABLE 6
TRIP GENERATION

Land Use	ITE Land	Size	Daily	AM Peak Hour			PM Peak Hour		
Land Ose	Use Code	312 <del>c</del>	Daily	In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Multi-Family Housing (Low Rise) Shopping Center High-Turnover Restaurant Automated Car Wash	220 820 932 948	per du per 1,000 sf per 1,000 sf per 1,000 sf	7.32 42.7 112.18 N/A	23% 62% 55% N/A	77% 38% 45% N/A	0.46 0.96 9.94 N/A	63% 48% 62% 50%	37% 52% 38% 50%	0.56 3.71 9.77 14.20
Proposed Project									
Apartment  Less 15% Transit/Walk-In [b]	220	71 du	520 (78)	8 <i>(1)</i>	25 <i>(4)</i>	33 <i>(5)</i>	25 <i>(4)</i>	15 <i>(2)</i>	40 (6)
Subtotal - Apartment			442	7	21	28	21	13	34
Commercial - Retail Less 10% Internal Capture [c]	934	4.821 ksf	206 (21)	3 0	2 0	5 0	9 (1)	9 (1)	18 (2)
Subtotal - Commercial - Retail			185	3	2	5	8	8	16
Commercial - Restaurant Less 10% Internal Capture [c]	934	4.419 ksf	496 (50)	24 (2)	20 (2)	44 <i>(4)</i>	27 (3)	16 (2)	43 (5)
Subtotal - Commercial - Restaurant			446	22	18	40	24	14	38
Total - Proposed Project			1,073	32	41	73	53	35	88
Existing Uses to be Removed									
Automated Car Wash	948	4.91 ksf	700	Nominal	Nominal	Nominal	35	35	70
Total - Net New Project Trips			373	32	41	73	18	0	18

#### Notes

<sup>[</sup>a] Source: Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017.

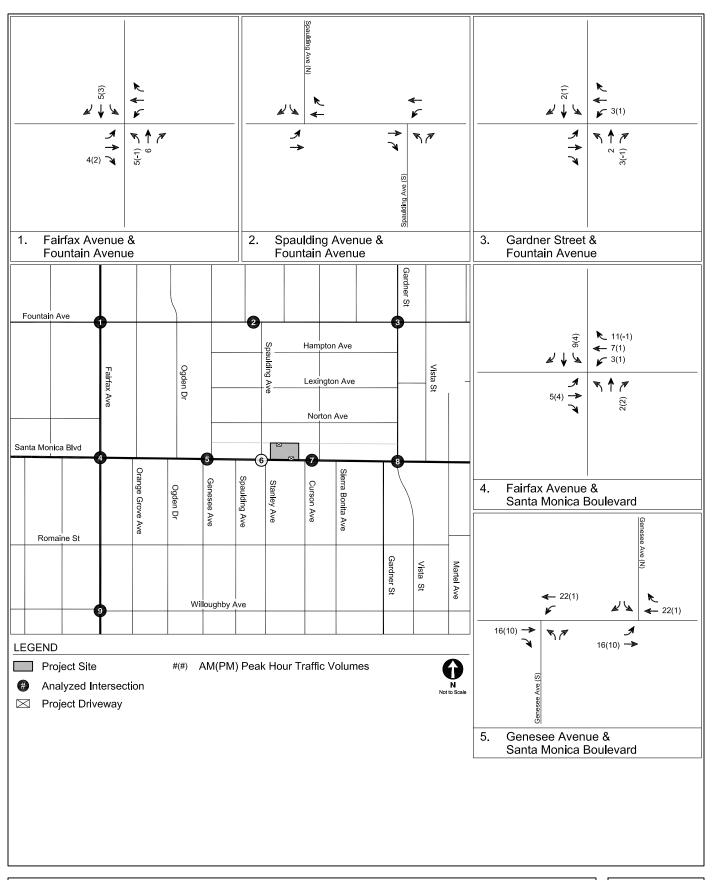
<sup>[</sup>b] The Project Site is located within a 0.15 miles walking distance from a RapidBus stop (Metro Rapid 704), as well as various local bus service stops. Therefore a 15% reduction is applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments.

<sup>[</sup>c] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development (i.e. between residents and commercial uses) without using an off-site road system.

#### PROJECT TRIP ASSIGNMENT

The trip distribution patterns illustrated in Figures 7A to 7D were applied to the trip generation estimates detailed in Table 6 to develop the Project-only traffic assignments. Figure 8 illustrates the traffic volumes of the existing uses through the study intersections through the study intersections.

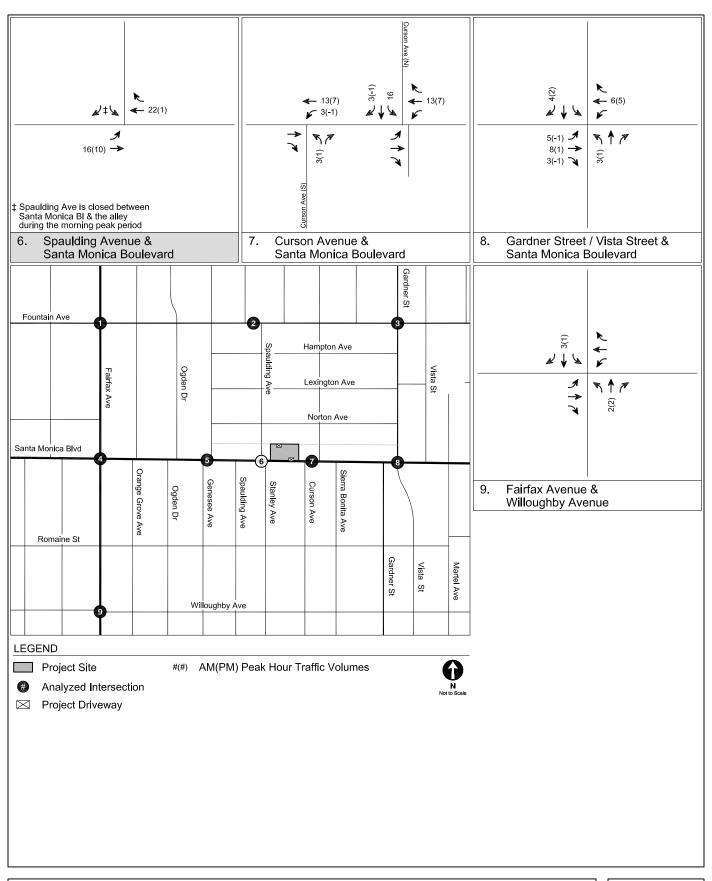




PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 8





PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 8 (CONT.)

## Chapter 5

## **Existing with Project Conditions**

This chapter describes the results of the analysis of intersection operating conditions associated with Existing with Project Conditions. The analysis year of 2018 corresponds with the Existing Conditions data and analysis presented in Chapter 2. Within this chapter, the Existing with Project Conditions are presented for the study intersections.

#### **EXISTING WITH PROJECT INTERSECTION OPERATIONS**

The Existing with Project Conditions are defined by the traffic volumes, roadways, and intersection configurations that currently exist in Year 2018. The Project-only traffic volumes described in Chapter 4 and shown in Figure 8 were added to the Existing traffic volumes shown in Figure 4 to obtain the Existing with Project peak hour traffic volumes, shown in Figure 9.

The study intersections were analyzed using the methodologies described in Chapter 2. The Existing with Project intersection operating conditions for typical weekday morning and afternoon peak hours are shown in Table 7. As shown, under the Existing with Project Conditions, seven of the nine study intersections are projected to operate at LOS D or better during both the morning and afternoon peak hours. The remaining two intersections are projected to operate at LOS E or F during either of the analyzed peak hours.

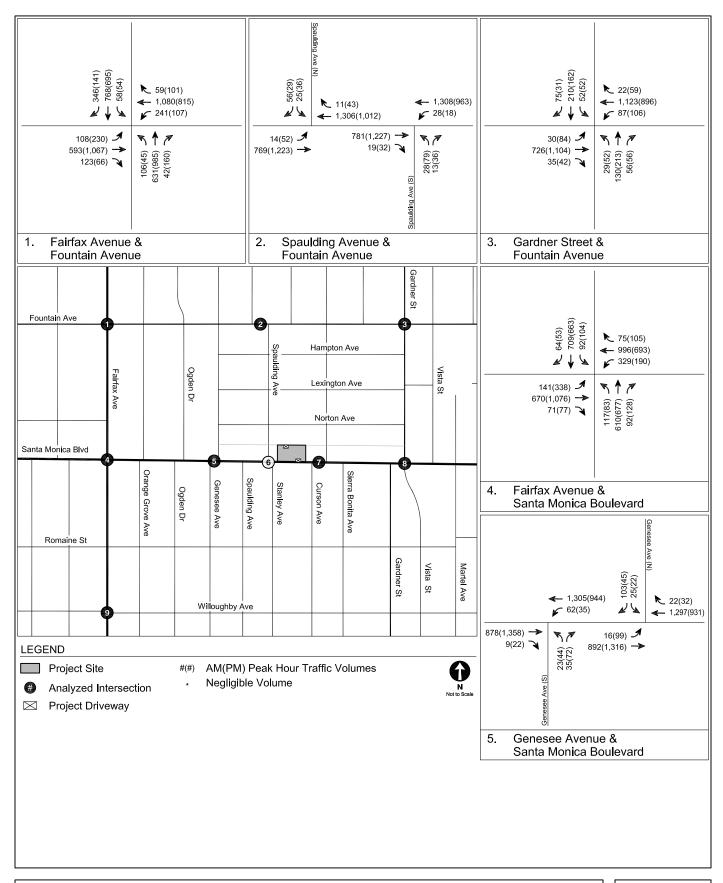
Detailed LOS worksheets are provided in Appendix D.

#### **SUMMARY**

As shown in Table 7, the incremental increase in delay with the addition of Project traffic is not anticipated to exceed the City's significance thresholds detailed in Chapter 1 at any of the nine study intersections under Existing with Project Conditions. Thus, the Project would not result in

a significant impact under Existing with Project Conditions, and no mitigation measures would be required.

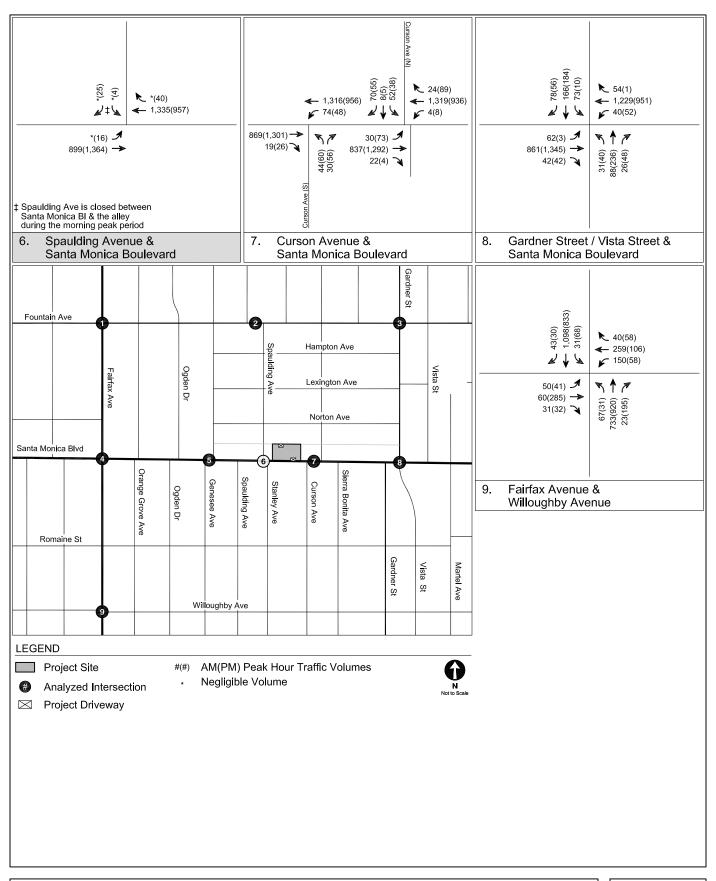




EXISTING WITH PROJECT CONDITIONS (YEAR 2018) PEAK HOUR TRAFFIC VOLUMES

FIGURE 9





EXISTING WITH PROJECT CONDITIONS (YEAR 2018) PEAK HOUR TRAFFIC VOLUMES

FIGURE 9 (CONT.)

# TABLE 7 EXISTING WITH PROJECT CONDITIONS (YEAR 2018) SIGNIFICANT IMPACT ANALYSIS

			Exis	sting	Existing with Project					
No	Intersection	Peak Hour	Delay (sec)	LOS	Delay (sec)	LOS	Change in Delay (sec)	Impact Threshold (sec)	Impact [c]	
1.	Fairfax Avenue &	A.M.	50.1	D	52.2	D	2.1	8.0	NO	
[a]	Fountain Avenue	P.M.	50.7	D	50.8	D	0.1	8.0	NO	
2a.	Spaulding Avenue (S) &	A.M.	3.9	Α	3.9	Α	0.0	N/A	NO	
[a]	Fountain Avenue	P.M.	4.5	Α	4.5	Α	0.0	N/A	NO	
2b.	Spaulding Avenue (N) &	A.M.	3.3	Α	3.3	Α	0.0	N/A	NO	
[a]	Fountain Avenue	P.M.	5.7	Α	5.7	Α	0.0	N/A	NO	
3.	Gardner Street &	A.M.	17.1	В	17.4	В	0.3	N/A	NO	
[a]	Fountain Avenue	P.M.	18.3	В	18.4	В	0.1	N/A	NO	
4.	Fairfax Avenue &	A.M.	48.4	D	49.3	D	0.9	12.0	NO	
[a]	Santa Monica Boulevard	P.M.	56.5	Е	57.1	Е	0.6	8.0	NO	
5a.	Genesee Avenue (N) &	A.M.	5.6	Α	5.7	Α	0.1	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	3.6	Α	3.6	Α	0.0	N/A	NO	
5b.	Genesee Avenue (S) &	A.M.	3.5	Α	3.6	Α	0.1	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	5.5	Α	5.5	Α	0.0	N/A	NO	
6.	Spaulding Avenue &	A.M. [d]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
[b]	Santa Monica Boulevard	P.M.	20.9	С	21.0	С	0.1	N/A	NO	
7a.	Curson Avenue (N) &	A.M.	4.2	Α	4.9	Α	0.7	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	3.9	Α	3.9	Α	0.0	N/A	NO	
7b.	Curson Avenue (S) &	A.M.	3.3	Α	3.6	Α	0.3	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	5.2	Α	5.3	Α	0.1	N/A	NO	
8.	Gardner Street/Vista Street &	A.M.	12.8	В	12.9	В	0.1	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	15.0	В	15.1	В	0.1	N/A	NO	
9.	Fairfax Avenue &	A.M.	23.5	С	23.7	С	0.2	N/A	NO	
[a]	Willoughby Avenue	P.M.	20.6	С	20.8	С	0.2	N/A	NO	

#### Notes

- [a] Signalized location analyzed with HCM Signalized methodology.
- [b] Unsignalized location analyzed with HCM Unsignalized methodology.
- [c] Based on City of West Hollywood criteria, an impact is considered significant if the following criteria are met: Intersection Formed by Two Commerical Corridors
  - The addition of project traffic results in a LOS D and an increase in delay of 12 seconds or greater.
  - The addition of project traffic results in a LOS E or F and an increase in delay of 8 seconds or greater.

#### All Other Signalized and/or 4-Way Stop-Controlled Intersections

- The addition of project traffic results in a LOS D and an increase in delay of 8 seconds or greater.
- The addition of project traffic results in a LOS E or F and an increase in delay of 5 seconds or greater.

#### Unsignalized Intersections

- The addition of project traffic results in a LOS D, E, or F and an increase in delay of 5 seconds or greater.
- [d] Spaulding Avenue is closed for fire department use only between the alley and Santa Monica Boulevard during the morning peak period. Therefore, turning movements at the intersection are limited during the morning peak hour. Thus, delay along Santa Monica Boulevard during the morning peak hour is considered to be minimal.

### Chapter 6

# Future with Project Conditions

This chapter describes the results of the analysis of intersection operating conditions associated with the Future with Project Conditions. The analysis year of 2022 corresponds to the projected full buildout year of the Project. All future background traffic growth (i.e., ambient and related project traffic growth) and transportation system improvements described in Chapter 3 are assumed in this analysis.

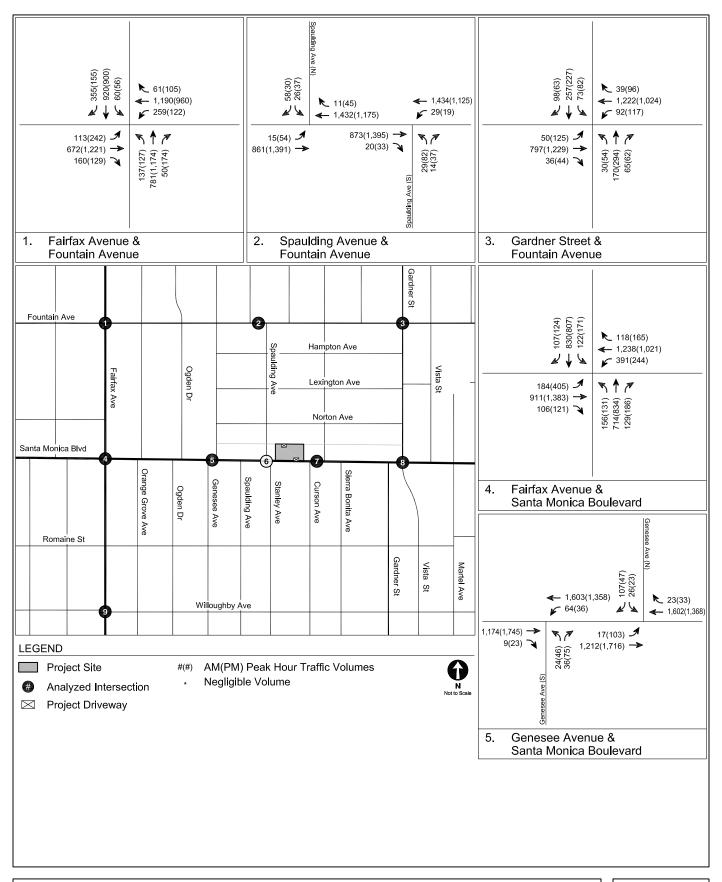
#### **FUTURE WITH PROJECT INTERSECTION OPERATIONS**

The Future with Project Conditions are defined by the traffic volumes, roadways, and intersection configurations that would exist in Year 2022 following full development of the Project. The Project-only traffic volumes described in Chapter 4 and shown in Figure 8 were added to the Future without Project traffic volumes shown in Figure 6 to obtain the Future with Project peak hour traffic volumes, shown in Figure 10.

The study intersections were analyzed using the methodologies described in Chapter 2. The Future with Project intersection operating conditions for typical weekday morning and afternoon peak hours are shown in Table 8. As shown, under the Future with Project Conditions, four of the nine study intersections are projected to operate at LOS D or better during both the morning and afternoon peak hours. The remaining five intersections are projected to operate at LOS E or F during at least one of the analyzed peak hours.

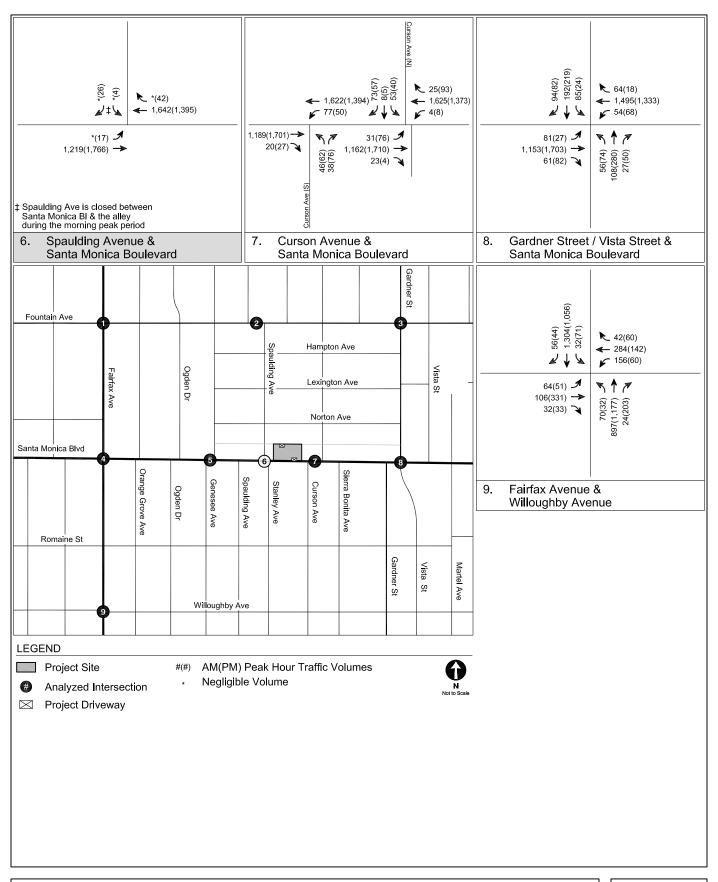
Detailed LOS worksheets are provided in Appendix D.





FUTURE WITH PROJECT CONDITIONS (YEAR 2022) PEAK HOUR TRAFFIC VOLUMES FIGURE 10





FUTURE WITH PROJECT CONDITIONS (YEAR 2022) PEAK HOUR TRAFFIC VOLUMES FIGURE 10 (CONT.)

# TABLE 8 FUTURE WITH PROJECT CONDITIONS (YEAR 2022) SIGNIFICANT IMPACT ANALYSIS

			Future without Project		Future with Project					
No	Intersection	Peak Hour	Delay (sec)	LOS	Delay (sec)	LOS	Change in Delay (sec)	Impact Threshold (sec)	Impact [c]	
1.	Fairfax Avenue &	A.M.	84.2	F	86.5	F	2.3	5.0	NO	
[a]	Fountain Avenue	P.M.	106.0	F	106.0	F	0.0	5.0	NO	
2a.	Spaulding Avenue (S) &	A.M.	4.4	Α	4.4	Α	0.0	N/A	NO	
[a]	Fountain Avenue	P.M.	4.8	Α	4.8	Α	0.0	N/A	NO	
2b.	Spaulding Avenue (N) &	A.M.	3.4	Α	3.4	Α	0.0	N/A	NO	
[a]	Fountain Avenue	P.M.	7.4	Α	7.4	Α	0.0	N/A	NO	
3.	Gardner Street &	A.M.	48.3	D	49.4	D	1.1	8.0	NO	
[a]	Fountain Avenue	P.M.	110.0	F	109.8	F	0.0	5.0	NO	
4.	Fairfax Avenue &	A.M.	113.4	F	115.7	F	2.3	8.0	NO	
[a]	Santa Monica Boulevard	P.M.	158.1	F	158.7	F	0.6	8.0	NO	
5a.	Genesee Avenue (N) &	A.M.	6.9	Α	7.1	Α	0.2	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	5.3	Α	5.3	Α	0.0	N/A	NO	
5b.	Genesee Avenue (S) &	A.M.	4.4	Α	4.5	Α	0.1	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	7.7	Α	7.8	Α	0.1	N/A	NO	
6.	Spaulding Avenue &	A.M. [d]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
[b]	Santa Monica Boulevard	P.M.	48.5	E	49.0	E	0.5	5.0	NO	
7a.	Curson Avenue (N) &	A.M.	5.0	Α	5.7	Α	0.7	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	5.2	Α	5.3	Α	0.1	N/A	NO	
7b.	Curson Avenue (S) &	A.M.	4.0	Α	4.4	Α	0.4	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	7.5	Α	7.5	Α	0.0	N/A	NO	
8.	Gardner Street/Vista Street &	A.M.	16.5	В	17.2	В	0.7	N/A	NO	
[a]	Santa Monica Boulevard	P.M.	25.6	С	25.7	С	0.1	N/A	NO	
9.	Fairfax Avenue &	A.M.	57.9	Е	58.6	E	0.7	5.0	NO	
[a]	Willoughby Avenue	P.M.	60.5	E	60.8	Е	0.3	5.0	NO	

#### Notes

- [a] Signalized location analyzed with HCM Signalized methodology.
- [b] Unsignalized location analyzed with HCM Unsignalized methodology.
- [c] Based on City of West Hollywood criteria, an impact is considered significant if the following criteria are met: Intersection Formed by Two Commerical Corridors
  - The addition of project traffic results in a LOS D and an increase in delay of 12 seconds or greater.
  - The addition of project traffic results in a LOS E or F and an increase in delay of 8 seconds or greater.

#### All Other Signalized and/or 4-Way Stop-Controlled Intersections

- The addition of project traffic results in a LOS D and an increase in delay of 8 seconds or greater.
- The addition of project traffic results in a LOS E or F and an increase in delay of 5 seconds or greater.

#### Unsignalized Intersections

- The addition of project traffic results in a LOS D, E, or F and an increase in delay of 5 seconds or greater.
- [d] Spaulding Avenue is closed for fire department use only between the alley and Santa Monica Boulevard during the morning peak period. Therefore, turning movements at the intersection are limited during the morning peak hour. Thus, delay along Santa Monica Boulevard during the morning peak hour is considered to be minimal.

#### SUMMARY

As shown in Table 8, the incremental increase in delay with the addition of Project traffic is not anticipated to exceed the City's significance thresholds detailed in Chapter 1 at any of the nine study intersections under Future with Project Conditions. Thus, the Project would not result in a significant impact under Future with Project Conditions, and no mitigation measures would be required.

# Chapter 7 Street Segment Analysis

The study street segment was analyzed based on the direction of the City.

#### STREET SEGMENT TRAFFIC VOLUMES

Street segment ADT counts during the typical weekday were conducted at the street segment of Spaulding Avenue between Hampton Avenue and Lexington Avenue over a 24-hour period (from midnight to midnight) on Tuesday, September 11, 2018.

Future without Project street segment volumes were estimated by applying an ambient growth factor to the anticipated year of project buildout and the addition of Related Project traffic to the Existing street segment traffic volumes.

Project traffic volumes were added to the Existing and Future without Project ADT volumes to estimate the Existing with Project and Future with Project ADT volumes. As previously described, travel on Spaulding Avenue between the alley and Santa Monica Boulevard is restricted daily during the morning peak period (7:00 AM to 10:00 AM) for exclusive fire station use.

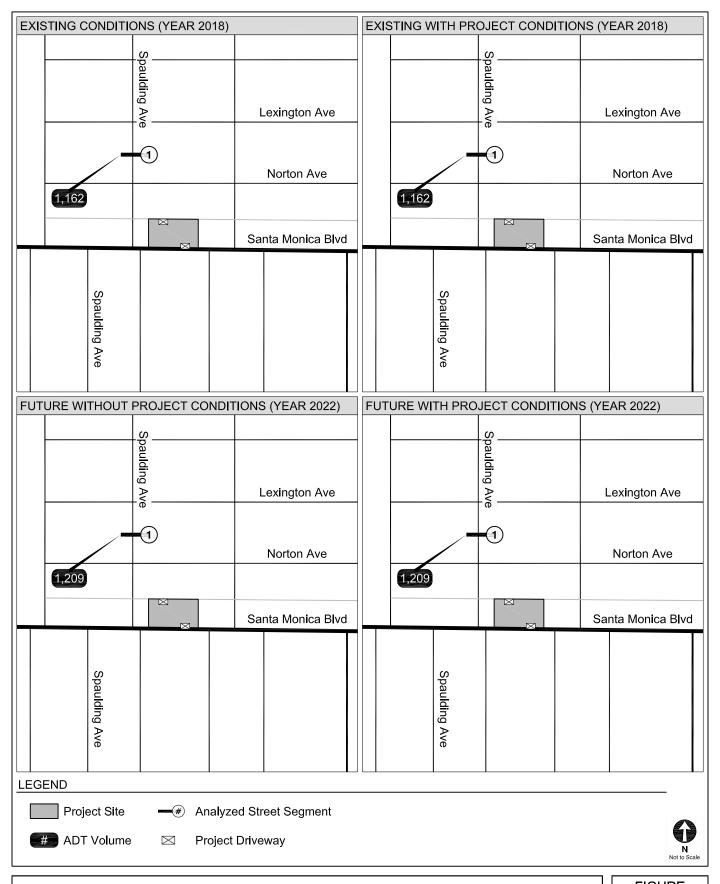
ADT volumes under all conditions may be found in Figure 11. The summary data worksheets of the study street segment ADT volumes are available in Appendix C.

#### **SUMMARY OF STREET SEGMENT ANALYSIS**

The analysis of the study street segments are provided in Tables 9 and 10 for Existing with Project and Future with Project Conditions, respectively. As shown, application of the City significant impact criteria to the Existing with Project and Future with Project scenario indicates that the Project is not anticipated to result in a significant impact at any of the three study street

segments. Thus, no residential street segment improvement measures are required or recommended.





STREET SEGMENT AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 11

# TABLE 9 EXISTING WITH PROJECT CONDITIONS (YEAR 2018) STREET SEGMENT ANALYSIS

		Average D	aily Traffic (AD	Increase in			
No.	Street Segment	Existing	Project	Existing with Project	ADT	Impact	
1.	Spaulding Avenue between Hampton Avenue & Lexington Avenue	1,162	0	1,162	0%	NO	

#### <u>Notes</u>

The City of West Hollywood deems a transportation impact at an intersection "signficant" based on the following criteria:

Projected ADT with Project (Final ADT)	Increase in ADT
0 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or 6,749	8% or more of final ADT
6,750 or more	6.25% or more of final ADT

### TABLE 10 FUTURE WITH PROJECT CONDITIONS (YEAR 2022) STREET SEGMENT ANALYSIS

	Street Segment	Average Daily Traffic (ADT) Volumes							
No.		Existing	Ambient Growth	Related Projects	Future without Project	Project	Future with Project	Increase in ADT	Impact
1.	Spaulding Avenue between Hampton Avenue & Lexington Avenue	1,162	46	0	1,208	0	1,208	0%	NO

#### Notes

The City of West Hollywood deems a transportation impact at an intersection "signficant" based on the following criteria:

Projected ADT with Project (Final ADT)

0 to 1,999

12% or more of final ADT

2,000 to 2,999

10% or more of final ADT

3,000 or 6,749

8% or more of final ADT

6,750 or more

6.25% or more of final ADT

### Chapter 8

## Congestion Management Program Analysis

This chapter presents an analysis of the regional transportation facilities in the vicinity of the Project Site, in accordance with the procedures outlined in *2010 Congestion Management Program for Los Angeles County* (Metro, 2010).

#### TRAFFIC IMPACT ANALYSIS GUIDELINES

The CMP requires that TIAs be performed on three types of facilities:

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

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

#### **Arterial Monitoring Intersection TIA Guidelines**

The CMP requires that a TIA be performed for all CMP arterial monitoring intersections where a project would add 50 or more trips during either the weekday morning or afternoon peak hours. A detailed analysis is not required if the project adds fewer than 50 trips to an arterial monitoring intersection. The CMP analysis determines the intersection volume-to-capacity (V/C) ratio, which is used to determine the intersection LOS according to the LOS definitions provided in Table 11. A significant impact requiring mitigation occurs if project traffic causes an incremental increase in intersection V/C ratio of 0.02 or greater to a facility projected to operate at LOS F (V/C > 1.00) after the addition of project traffic.

TABLE 11
LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS

Level of Service	Signalized V/C Ratio [a]	Definition
А	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
В	B 0.601 - 0.700 VERY GOOD. An occasional approach phase is futilized; many drivers begin to feel somewhat restriction within groups of vehicles.	
С	0.701 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 - 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

#### Notes

<sup>[</sup>a] Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980.

#### **Mainline Freeway Monitoring Location TIA Guidelines**

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

#### **Transit Impact Review Guidelines**

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

#### **ARTERIAL MONITORING STATION ANALYSIS**

The CMP identifies the following arterial monitoring intersections within or in proximity to the Study Area:

- Highland Avenue & Santa Monica Boulevard (approximately 1.0 miles east of the Project Site)
- La Cienega Boulevard & Santa Monica Boulevard (approximately 1.2 miles west of the Project Site)

The arterial monitoring intersections listed above are located outside of the Project Study Area. Thus, morning and afternoon peak hour traffic for these intersections was based on the number of trips entering and leaving the Study Area (based on Figure 8) in the direction of the outlying CMP arterial monitoring intersections, conservatively assuming there would be no diverging

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

Intersection		Hour ps	Requires CMP	
		PM	Analysis?	
Highland Avenue & Santa Monica Boulevard	19	4	NO	
La Cienega Boulevard & Santa Monica Boulevard	25	6	NO	

The Project would not add more than 50 peak hour trips to the arterial monitoring intersection at any of the CMP arterial monitoring intersections. Therefore, further analysis is not required, and the Project is not anticipated to result in significant a CMP impact.

#### FREEWAY SEGMENT ANALYSIS

The CMP identifies the following three mainline freeway monitoring locations located approximately 4.0 miles from the Project Site:

Francis Mainline	Peak H	Requires	
Freeway Mainline	AM	PM	CMP Analysis?
US 101 south of Santa Monica Boulevard			
Northbound	4	4	NO
Southbound	7	1	NO
I-10 at Budlong Avenue			
Eastbound	0	0	NO
Westbound	0	0	NO
I-10 at La Brea Avenue			
Eastbound	0	0	NO
Westbound	0	0	NO

The Project would not add 150 trips in either direction during either peak hour. Therefore, no CMP impact would occur and no additional freeway analysis is required under the CMP criteria for existing or future conditions.

#### **REGIONAL TRANSIT IMPACT ANALYSIS**

Section B.8.4 of the CMP provides a methodology for estimating the number of transit trips expected to result from a proposed project based on the number of vehicle trips. This methodology assumes an average vehicle ridership (AVR) factor of 1.4 in order to estimate the number of person trips to and from the Project and guidance regarding the percentage of Project person trips that may use public transit to travel to and from the Project Site depending on the mix of uses and proximity to transit. Based on the assumptions in the trip generation estimates shown in Table 8, a 15% transit/walk adjustment was applied to the residential uses to account for the use of non-auto travel modes (e.g., bus, bicycle, walk, etc.). For the purposes of this analysis, all transit/walk trip generation estimates from Table 6 were conservatively assumed to travel via public transit.

As shown in Table 6, the 15% transit usage/walk-in adjustment accounts for approximately five morning peak hour vehicle trips and six afternoon peak hour vehicle trips. Assuming an AVR of 1.4, the Project would generate approximately seven net new transit trips in the morning peak hour and approximately eight net new transit trips in the afternoon peak hours.

As detailed in Chapter 2, the Study Area is served by numerous established transit routes. The total residual capacity of the transit lines within the Study Area during the morning and afternoon peak hours is approximately 1,974 and 1,422 transit trips, respectively. The Project's morning and afternoon peak hour person trips by transit are projected at seven trips and eight trips, respectively, or less than 0.5% of the available capacity during the morning and afternoon peak hours. Therefore, the Project is not anticipated to result in material regional transit impacts.

Furthermore, County voters approved Measure R, a half-cent sales tax increase for transportation, which has allowed Metro to develop projects to improve the existing transportation system. 2009 Long Range Transportation Plan (Metro, Adopted 2009) ("2009 LRTP"), which outlined a range of transit and highway projects throughout Los Angeles County that were aimed to improve mobility and address future growth, is currently in the process of an update to address transportation issues and projects identified by local jurisdictions, Councils of Governments, and transportation agencies. 2014 Short Range Transportation Plan (Metro, Adopted 2014) identified projects and programs that will be implemented in accordance with the project priorities and funding schedules of the 2009 LRTP. Although the Project (and other

related projects) will cumulatively add transit ridership, Metro will continue to maintain and expand regional transit service to accommodate cumulative demand in the region; therefore, cumulative impacts on public transit are considered to be less than significant.

## Chapter 9

## Construction Impact Analysis

This chapter summarizes the construction schedule and construction impact analysis for the Project. The construction impact analysis relates to the temporary impacts that may result from the construction activities of the Project, which may include safety, operational, or capacity impacts. This analysis was performed in accordance with City guidelines. Though there is a small chance that Project construction activities could coincide with construction of other projects in the vicinity, the impacts of the Project would not be affected by these activities. Further, the Project would implement a construction traffic management plan that would be coordinated with other construction projects in the vicinity, as necessary, to minimize conflicts.

#### PROPOSED CONSTRUCTION SCHEDULE

The Project is anticipated to be constructed over a period of approximately 30 months, with construction commencing in Year 2019 with completion anticipated in Year 2022. The construction period would include subphases of site demolition, site preparation, grading, building construction, paving, and architectural coating. Peak haul activity occurs during site preparation and grading, and peak worker activity occurs during building construction. These two subphases of construction were studied in greater detail.

#### SITE PREPARATION AND GRADING PHASE

The peak period of truck activity during construction would occur during site preparation and grading of the Project Site. Based on projections compiled for the Project, approximately 25,000 cubic yards (CY) of material would be excavated and removed from the Project Site over this seven-month period. That equates to approximately 189 CY of material exported each workday, requiring 19 haul trucks per work day based on an anticipated haul truck capacity of 10 CY each. Thus, up to 38 daily truck trips (19 inbound, 19 outbound) are forecast to occur during the

site preparation and grading period, with approximately six trips per hour (three inbound, three outbound) uniformly over a typical six-hour workday.

Transportation Research Circular No. 212, Interim Materials on Highway Capacity, (Transportation Research Board, 1980) defines passenger car equivalency (PCE) for a vehicle as the number of through moving passenger cars to which it is equivalent based on the vehicle's headway and delay-creating effects. Table 8 of Transportation Research Circular No. 212 and Exhibit 16.7 of the HCM suggest a PCE of 2.0 for trucks. Assuming a PCE factor of 2.0, the 38 truck trips would be equivalent to 76 daily PCE trips. The six hourly truck trips would be equivalent to 12 PCE trips (six inbound, six outbound) per hour. In addition, during this period an average of 15 construction workers would work at the Project Site. Assuming minimal carpooling amongst those workers, an AVR of 1.135 persons per vehicle was applied, as provided in CEQA Air Quality Handbook (South Coast Air Quality Management District, 1993). Therefore, 15 workers would result in a total of 13 vehicle trips to and from the Project Site on a daily basis.

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

Haul trucks would travel on approved truck routes designated within the City and would generally take the most direct route to the appropriate freeway ramp, using only arterial roadways that allow large trucks. Haul trucks arriving to and departing from the Project Site would access I-405 or US-101 via Santa Monica Boulevard or I-10 via Santa Monica Boulevard to Fairfax Avenue or Crenshaw Boulevard. The proposed truck haul routes will be reviewed and approved by the City.

#### **BUILDING CONSTRUCTION PHASE**

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

The estimated number of construction workers each day depends on the phase of construction. According to construction projections prepared for the Project, the building subphase of construction would employ the most construction workers, with a cumulative average of approximately 150 workers per day for all components of the building (i.e., framing, plumbing, elevators, inspections, finishing). However, since the different building components would not be constructed or installed simultaneously this cumulative estimate overstates the number of workers that would be expected on the peak construction day. Furthermore, there would be far fewer workers on most of the estimated 800 workdays to complete the Project than on the peak day. Therefore, the estimate of 150 workers per day used for the purposes of this analysis represents a higher-than-expected estimate.

Assuming an AVR of 1.135 persons per vehicle, 150 workers would result in a total of 132 vehicles that would arrive and depart from the Project Site each day. The estimated number of daily trips associated with the construction workers is approximately 264 (132 inbound and 132 outbound trips), but nearly all of those trips would occur outside of the peak hours, as described above. As such, the building phase of Project construction is not expected to cause a significant traffic impact at any of the study intersections.

During construction, adequate parking for construction workers would be secured in the vicinity of the Project Site. Restrictions against workers parking in the public right-of-way in the vicinity of (or adjacent to) the Project Site will be identified as part of the Construction Management Plan. Construction parking may require the temporary use of offsite parking areas for materials storage and truck staging.

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

Construction activities are expected to be primarily contained within the Project Site boundaries. However, it is expected that construction fences may encroach into the public right-of-way (e.g., sidewalk and roadways) adjacent to the Project Site. Adjacent to the Project Site, the curb lane on Santa Monica Boulevard will be used intermittently throughout the construction period for equipment staging, concrete pumping, etc. Temporary traffic controls would be provided to direct traffic around any closures as required in the Construction Management Plan. As shown in Table 12, the lane closures would result in temporary significant and unavoidable impacts at the intersection of Spaulding Avenue & Santa Monica Boulevard during the morning and afternoon peak hours and at the intersection of Curson Avenue & Santa Monica Boulevard in the morning peak hour.

The LOS worksheets are provided in Appendix F.

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

Existing bus stops are located adjacent to the southern boundary of the Project Site will be maintained to the extent feasible during construction or relocated consistent with the needs of Metro Bus Operations. Parking is allowed on Santa Monica Boulevard (during certain hours of the day) adjacent to the Project Site, so the construction fences could result in the temporary loss of up to up to four on-street parking spaces on Santa Monica Boulevard.

Project construction is not expected to create hazards for roadway travelers, bus riders, or parkers, as 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.

TABLE 12
EXISTING WITH CONSTRUCTION CONDITIONS (YEAR 2018)
SIGNIFICANT IMPACT ANALYSIS

		Dook	Exis	ting	Ex	isting with	Construction	on
No	Intersection	Peak Hour	Delay (sec)	LOS	Delay (sec)	LOS	Change in Delay (sec)	Impact
6.	Spaulding Avenue &	A.M.	0.0	Α	0.0	Α	0.0	NO
[b]	Santa Monica Boulevard	P.M.	20.9	С	31.6	D	10.7	YES
7b.	Curson Avenue (S) &	A.M.	3.2	Α	37.4	D	34.2	YES
[a]	Santa Monica Boulevard	P.M.	5.2	Α	8.6	Α	3.4	NO

#### <u>Notes</u>

- \* LOS based on field observations, as the calculated delay for individual intersections does not inevery case account for vehicular queues along corridors, pedestrian conflicts, etc., and thus, the calculated average operating conditions may appear better than is observed.
- [a] Signalized location analyzed with HCM Signalized methodology.
- [b] Unsignalized location analyzed with HCM Unsignalized methodology.

#### **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. 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:

- Prohibition of construction worker parking on adjacent residential streets.
- Temporary traffic control during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways (e.g., flag men).
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Construction-related vehicles shall not park on surrounding public streets.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate.
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible.

## Chapter 10 Parking Analysis

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

#### **PARKING SUPPLY**

As proposed, the Project would provide approximately 177 striped parking spaces in a two-level subterranean parking garage and surface-level parking on site.

#### **CODE REQUIREMENTS**

West Hollywood Municipal Code (City of West Hollywood) (WHMC) Section 19.28.040 Tables 3 to 6 identify the off-street parking requirements of various land uses and the required off-street parking ratio for all developments proposed within the City. As detailed in Chapter 1, 11 of the 71 Project residential units (approximately 15%) would be made available for affordable housing. Therefore, under Senate Bill No. 1818 (State of California, Approved September 2004), the Project qualifies for a density bonus and reduced parking requirements could be applied. In addition, the West Hollywood Municipal Code allows for commercial or mixed-use projects that select and comply with a minimum of 90 points from the West Hollywood Green Building Point System Table may provide parking for new restaurant tenant space of 1,200 sf or less, for a maximum of 2,400 sf, at a reduced rate. The following parking rates were applied to the proposed floor area of the Project to determine the required amount of off-street parking stalls.

- <u>Duplexes, multi-family dwellings, condominiums, townhouses</u>
  - One bedroom or studio greater than 500 sf 1.0 one space per unit
  - Two to Three bedrooms 2.0 spaces per unit
  - Four or more bedrooms 2.5 spaces per unit

- Guests 1.0 space per four units
- Non-Residential Land Uses
  - o Retail 3.5 spaces per 1,000 sf
  - Restaurants
    - Up to 2,400 sf 3.5 spaces per 1,000 sf
    - Remaining beyond 2,400 sf 9.0 spaces per 1,000 sf
    - ≥ 251 sf Outdoor Dining 9.0 spaces per 1,000 sf

### **Code Required Project Parking**

The Project consists of the following components:

- Residential
  - One bedroom or studio greater than 500 sf − 52 units
  - Two-three bedroom dwelling unit 19 units
- Non-Residential Uses
  - o Retail 4,821 sf
  - o Restaurant 4,419 sf

The aforementioned off-street parking ratios were applied to these components in order to determine the WHMC off-street parking requirement for the Project. As detailed in Table 13, the residential portion of the Project is required to provide a total of 108 spaces, including 90 residential spaces and 18 guest parking spaces. The retail component is required to provide 17 spaces and the restaurant component is required to provide 26 spaces.

The total off-street parking requirement for the Project, as determined by the WHMC, is 151 parking spaces. This parking requirement, when compared to the proposed parking supply of 177 on-site parking spaces, would be satisfied by the proposed parking supply.

TABLE 13
CODE REQUIRED PARKING

Land Use	Size	Park	ing R	ate [a]	Parking Required		
Apartment [b]							
Studio (less than 500 sf)	21 du	1.0 sp	1	1 du	21	sp	
One Bedroom	31 du	1.0 sp	1	1 du	31	sp	
Two & Three-Bedroom	19 du	2.0 sp	1	1 du	38	sp	
Four Bedroom	0 du	2.5 sp	1	1 du	0	sp	
Guest	71 du	1.0 sp	1	4 du	18	sp	
Retail	4,821 sf	3.5 sp	1	1,000 sf	17	sp	
Restaurant	2,019 sf	9.0 sp	1	1,000 sf	18	sp	
Restaurant [c]	1,200 sf	3.5 sp	/	1,000 sf	4	sp	
Restaurant [c]	1,200 sf	3.5 sp	1	1,000 sf	4	sp	
Total				-	151	sp	

#### Notes

<sup>[</sup>a] Parking rates per West Hollywood Municipal Code (City of West Hollywood) Section 19.28.040, Tables 3 to 6.

<sup>[</sup>b] Per SB 1818 (2004), projects that contain set-aside afforable units may apply reduced parking requirements.

<sup>[</sup>c] Per Section 19.20.060 of the *West Hollywood Municipal Code*, new restaurant tenants spaces of 1,200 sf or less in commercial or mixed-use projects that select and comply with a minimum of 90 points from the West Hollywood Green Building Point System Table may provide parking at a ratio of 3.5 spaces per 1,000 sf, for a maximum of 2,400 sf per project.

## Chapter 11

## Transportation Demand Management

This chapter details the City's recently adopted Transportation Demand Management (TDM) Ordinance (Ordinance No. 18-1034, WHMC Chapter 10.16), which requires qualified development projects to participate.

#### **TDM REQUIREMENTS**

The following describes the TDM requirements for qualifying development project types, as detailed in the TDM Ordinance. Table 14 provides a menu of strategies that could be implemented as part of a TDM Plan. Detailed descriptions of the strategies are provided in Appendix G.

### **Commercial or Mixed-Use Development**

Per Section 10.16.040, the following types of commercial or mixed-use development projects qualify to participate:

- A new structure containing 5,000 sf or more of commercial floor area
- Any major remodel to any existing structure where the completed structure contains 5.000 sf or more of commercial floor area
- An addition of 5,000 sf or more of commercial floor area to any structure

Should a commercial or mixed-use development meet the above criteria, the following are required in the TDM program:

1. TDM Marketing – Implement the requirements for TOM Marketing, as outlined in Section 10.16.070

## TABLE 14 MENU OF TDM STRATEGIES

Trip Reduction Strateg	nv.	Applicabilit	y (Commercial,	, Mixed-Use,	Interv	ention	Cost	Effectiveness			
Trip Reduction Strateg	Jy		Residential)		(Physical or	Operational)	Cost	Effectiveness			
Description		С	MU	R	P	0	(\$-\$\$\$)	(•- ••••)			
Wayfinding/Signage		•	•	•	•		\$\$	•			
Real-time Information		•	•	•	•		\$\$-\$\$\$\$	••			
Bike Repair Station		•	•	•	•		\$	•			
Guaranteed Ride Home		•	•			•	\$	•			
Rideshare Matching		•	•			•	\$\$	••			
Delivery Amenities			•	•	•		\$	•			
Bike Racks		•	•	•	•		\$	•			
Secure Bike Storage		•	•	•	•		\$\$	•			
Bike Share Hub		•	•	•	•		\$\$\$	••			
Preferential Parking		•	•		•		\$	••			
EV Chargers & Preferer	ntial Parking	•	•		•		\$\$\$	••			
Car Share Parking		•	•	•	•		\$	•			
Car Share Membership		•	•	•		•	\$\$	•			
Price Parking		•	•			•	\$	••••			
Bike Share Membership	)	•	•	•		•	\$\$	•			
Telecommuting		•	•			•	\$	••			
Vanpool, Shuttle Prefere	ential Parking	•	•			•	\$\$-\$\$\$	••			
Employee Parking Cash	Out	•	•			•	\$\$\$	••••			
Unbundled Parking				•		•	\$	•••			
Showers/Lockers		•	•		•		\$\$\$	••••			
Transit Subsidies		•	•			•	\$\$\$\$	•••			
Commuter Incentives		•	•			•	\$\$\$	••			
On-site Daycare		•	•		•		\$\$\$	••			
Innovative Measures		•	•	•	Va	ries	Varies	Varies			
Legend:		<u> </u>		<u> </u>							
Applicability:	Some strategies are be strategies are universal		rtain types of de	velopments incl	uding commerci	al, mixed-use an	nd residential, w	hile other			
Кеу:	Commercial (C); Mixed-	·Use (MU); Resi	dential (R)								
Physical or Operational:		Some strategies are physical improvements, with up-front investments that sometime have ongoing maintenance requirements, while others are operational programs that necessitate ongoing implementation, oversight, and costs.									
Cost:	Costs for each strategy relative costs to help us					s to help provide	initial high-leve	el guidance on			
Effectiveness:	Traveled (VMT), reducir	The "Effectiveness" dots measure a strategy's contribution to Citywide goals, including reducing drive-alone trips or Vehicle Miles Traveled (VMT), reducing air pollution and greenhouse gas emissions, increasing the convenience and affordability of multiple transportation options, and improving overall quality of life in West Hollywood. Strategies that help the City meet these goals score higher in this category.									

- 2. TDM Plan and Required Trip Reduction Strategies Submit a TDM plan with the contents outlined in Section 10.16.060(a) that provides a minimum number of trip reduction strategies as follows:
  - a. Commercial or mixed-use structures with a total of 10,000 sf or less of floor area: four strategies
  - b. Commercial or mixed-use structures with a total of more than 10,000 sf of floor area: eight strategies
- 3. AVR Goal Employ best efforts to implement TDM strategies determined in TDM plan to achieve the commercial-only AVR goal of 1.5
- 4. TDM Survey Conduct the annual TDM survey, as outlined in Section 10.16.080, provided by and submitted to the Director of Public Works or designated appointee, which calculates estimated AVR
- 5. Submit a Commercial and Mixed-Use Development Annual Report, as further outlined in Section 10.16.08
- 6. Maintain TDM records in accordance with Section 10.16.110.

#### **New Residential Structures with 10 or More Dwelling Units**

- 1. TDM Plan and Required Trip Reduction Strategies Submit a TDM plan with the contents outlined in Section 10.16.060(a), that provides a minimum number of trip reduction strategies as follows:
  - a. Residential structures with 10-19 units: three strategies
  - b. Residential structures with 20 or more units: five strategies
- 2. TDM Survey Conduct annual TDM survey, as outlined in Section 10.16.080, provided by and submitted to the Director of Public Works or designated appointee
- 3. Submit a residential annual compliance report, as further outlined in Section 10.16.100
- 4. Maintain TDM records in accordance with Section 10.16.110

#### **Employers with 10 or More Employees**

- 1. TDM Marketing Implement the requirements for TDM marketing, as outlined in Section 10.16.070
- 2. TDM Survey Conduct the annual TDM survey, as outlined in Section 10.16.080, provided by and submitted to the Director of Public Works or designated appointee

## **Employers with 250 or More Employees**

All employers with 250 or more employees shall comply with the South Coast Air Quality Management District Rule 2202 (On-Road Motor Vehicle Mitigation Options, Employee Commute Reduction Program Guidelines) as may be amended from time to time and shall provide the City with verification of this compliance on an annual basis.

#### PROJECT TDM REQUIREMENTS

Based on the proposed development program, the Project would qualify to participate in the City's TDM program. The Project would work with the City to develop a TDM Plan in accordance with the requirements of the TDM Ordinance.

## Chapter 12

## Summary and Conclusions

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

- The Project is proposing the construction of a four-story mixed-use development that consists of 71 apartment units, including 11 affordable units, and approximately 9,240 sf of ground floor commercial space, including retail and restaurant uses.
- The Project is estimated to generate a total of 373 daily trips, including 73 trips during the morning peak hour and 18 trips during the afternoon peak hour.
- The transportation analysis includes nine study intersections. Of the nine, eight intersections operate at LOS D or better under Existing Conditions during both the morning and afternoon peak hours, and four intersections are anticipated to operate at LOS D or better under Future without Project Conditions (Year 2022) during both the morning and afternoon peak hours.
- The Project traffic was added to the existing circulation system to develop the Existing
  with Project traffic condition. Based on City significance criteria, impacts were
  determined to be less than significant under Existing with Project (Year 2018)
  Conditions. Therefore, no mitigation measures are required or recommended for the
  Existing with Project Conditions.
- Future traffic conditions in the Study Area were forecast for the Project buildout year of 2022. Based on City significance criteria, impacts were determined to be less than significant under Future with Project Conditions (Year 2022). Therefore, no mitigation measures are required or recommended for the Future with Project Conditions.
- One street segment was selected for analysis. The Project is not anticipated to result in a significant impact at the study street segment under either Existing or Future Conditions.
- Analysis of potential impacts on the regional transportation system conducted in accordance with CMP guidelines determined that the Project would not have a significant impact on the regional arterial system or transit system.
- Construction of the Project may result in a temporary impact at the intersections of Spaulding Avenue & Sunset Boulevard and Curson Avenue & Sunset Boulevard; however, the impacts would be mitigated with the implementation of a Construction Management Plan.

• The Project would provide approximately 177 striped parking spaces in an on-site parking garage and in surface parking. The code-required parking spaces will be satisfied within the on-site supply.

## References

2009 Long Range Transportation Plan, Los Angeles County Metropolitan Transportation Authority, Adopted 2009.

2010 Highway Capacity Manual, Transportation Research Board, 2010.

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

2014 Short Range Transportation Plan, Los Angeles County Metropolitan Transportation Authority, Adopted 2014.

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

National Cooperative Highway Research Program Report 684 – Enhancing Internal Trip Capture Estimation for Mixed-Use Developments, Transportation Research Board and National Research Council, 2011.

Senate Bill No. 1818, State of California, Approved September 2004.

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

*Trip Generation, 10<sup>th</sup> Edition,* Institute of Transportation Engineers, 2017.

*Trip Generation Handbook, 3rd Edition*, Institute of Transportation Engineers, 2017.

West Hollywood General Plan 2035, City of West Hollywood, 2011.

West Hollywood Municipal Code, City of West Hollywood.

## Appendix A Traffic Study Scope

Project Name: 7617 Santa Monica Boulevard Mixed-Use Project

Project Address: 7617 Santa Monica Boulevard, West Hollywood, CA 90069

Project Description: The Project includes the construction of a mixed-use development that consists of 71 apartment units, including 11 affordable units, and approximately 9,240 square feet (sf) of ground floor commercial space, including retail and restaurant uses. The existing 4,910 sf car wash would be removed with development of the Project. (see Figure 1)

Trip Generation Rate(s): <u>ITE 10<sup>th</sup> Edition, 2017</u> (See Table 1)

> total out AM Trips 34 57 PM Trips 10

Trip Distribution:

Residential

E: 30% N: W: 30% Commercial 20% 25% E: 25% W: 30%

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

### Study Intersections

(See Figure 2)

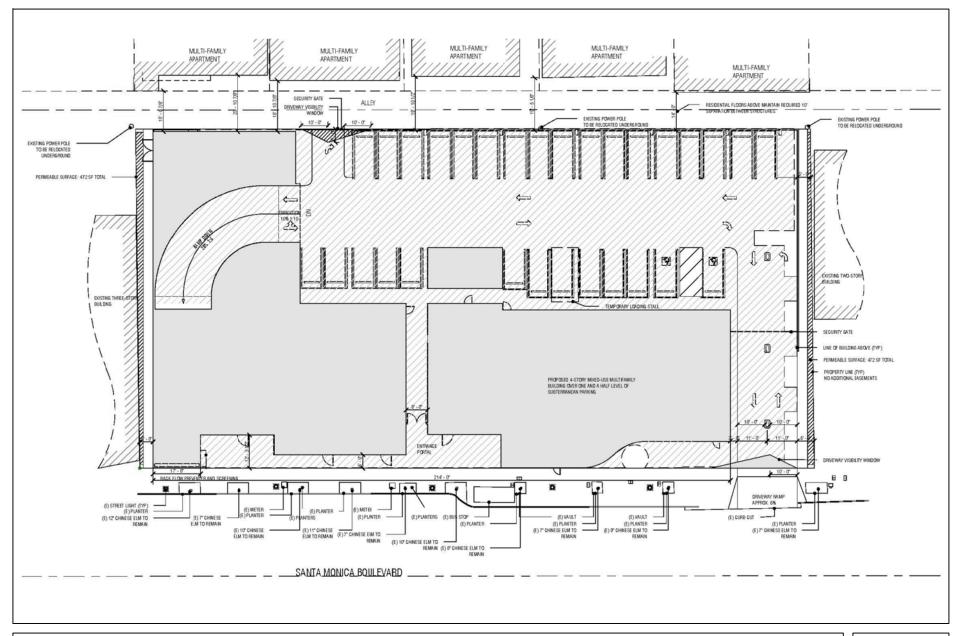
- 1. Fairfax Avenue & Fountain Avenue
- 2. Spaulding Avenue & Fountain Avenue
- 3. Gardner Street & Fountain Avenue
- 4. Fairfax Avenue & Santa Monica Boulevard
- 5. Genesee Avenue & Santa Monica Boulevard
- Spaulding Avenue & Santa Monica Boulevard (unsignalized)
- Curson Avenue & Santa Monica Boulevaru
   Gardner Street/Vista Street & Santa Monica Boulevard
   Fairfax Avenue & Willoughby Avenue

### Residential Street Segments

(See Figure 2)

1. Spaulding Avenue between Norton Avenue and Lexington Avenue

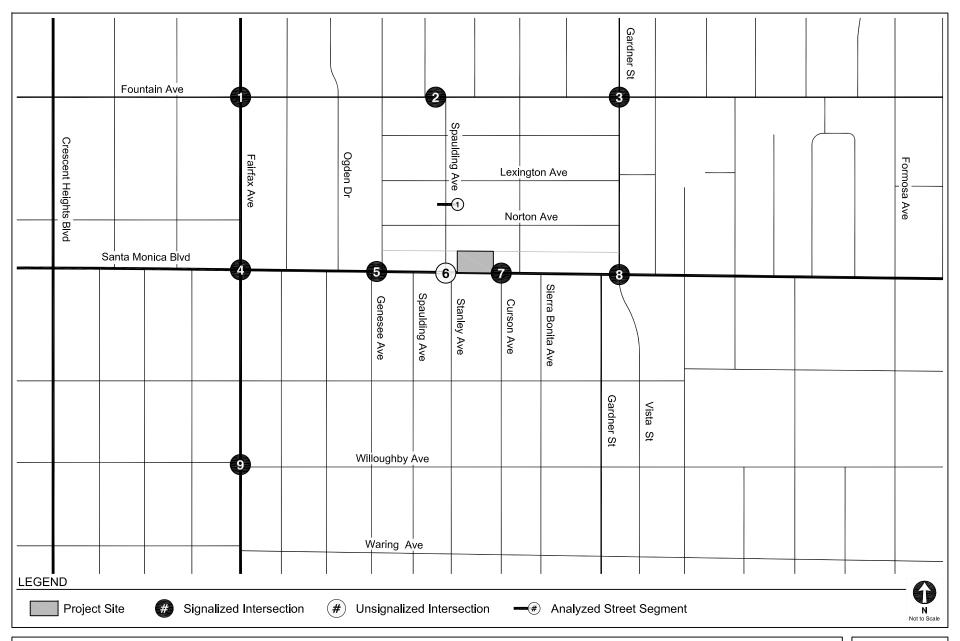




PROJECT SITE PLAN

FIGURE 1





STUDY AREA

FIGURE 2

TABLE 1
TRIP GENERATION

Land Use	ITE Land	Size	Daily	Δ.	M Peak Ho	ır	Р	M Peak Ho	ur
Land Ose	Use Code	51Ze	Daily	In	Out	Total	ln	Out	Total
Trip Generation Rates [a]									
Multi-Family Housing (Low Rise) Shopping Center	220 820	per du per 1,000 sf	7.32 42.7	23% 62%	77% 38%	0.46 0.96	63% 48%	37% 52%	0.56 3.71
High-Turnover Restaurant	932	per 1,000 sf	112.18	55%	45%	9.94	62%	38%	9.77
Automated Car Wash	948	per 1,000 sf	N/A	N/A	N/A	N/A	50%	50%	14.20
Proposed Project									
Apartment	220	71 du	520	8	25	33	25	15	40
Less 15% Transit/Walk-In [b]			(78)	(1)	(4)	(5)	(4)	(2)	(6)
Subtotal - Apartment			442	7	21	28	21	13	34
Commercial - Retail	934	4.821 ksf	206	3	2	5	9	9	18
Less 10% Internal Capture [c]			(21)	0	0	0	(1)	(1)	(2)
Less 15% Transit/Walk-In [b]			(28)	0	0	0	(1)	(1)	(2)
Less 50% Pass-by [d]			(79)	(2)	(1)	(3)	(4)	(4)	(8)
Subtotal - Commercial - Retail			78	1	1	2	3	3	6
Commercial - Restaurant	934	4.419 ksf	496	24	20	44	27	16	43
Less 10% Internal Capture [c]			(50)	(2)	(2)	(4)	(3)	(2)	(5)
Less 15% Transit/Walk-In [b]			(67)	(3)	(3)	(6)	(4)	(2)	(6)
Less 20% Pass-by [d]			(76)	(4)	(3)	(7)	(4)	(2)	(6)
Subtotal - Commercial - Restaurant			303	15	12	27	16	10	26
Total - Proposed Project			823	23	34	57	40	26	66
Existing Uses to be Removed									
Automated Car Wash	948	4.91 ksf	700	Nominal	Nominal	Nominal	35	35	70
Less 20% Pass-by [d]	340	4.01 KG	(140)				(7)	(7)	(14)
Total - Existing Uses to be Removed			560	Nominal	Nominal	Nominal	28	28	56
Total - Net New Project Trips		263	23	34	57	12	(2)	10	

#### Notes

<sup>[</sup>a] Source: Trip Generation, 10th Edition, Institute of Transportation Engineers, 2017.

<sup>[</sup>b] The Project Site is located within a 0.15 miles walking distance from a RapidBus stop (Metro Rapid 704), as well as various local bus service stops. Therefore a 15% reduction is applied to account for transit usage and walking visitor arrivals from the surrounding neighborhoods and adjacent commercial developments.

<sup>[</sup>c] Internal capture adjustments account for person trips made between distinct land uses within a mixed-use development (i.e. between residents and commercial uses) without using an off-site road system.

<sup>[</sup>d] 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.

# Appendix B Intersection Lane Configurations



6. Spaulding Avenue &

Santa Monica Boulevard

## **LEGEND** Traffic Signal Stop Sign Buses & Right-turns Only, Peak Hours **EXISTING CONDITIONS FUTURE CONDITIONS** (YEAR 2018) (YEAR 2022) Same as Existing Conditions 1. Fairfax Avenue & Fountain Ave Fountain Avenue Fairfax Ave 2. Spaulding Avenue & Same as Fountain Ave **Existing Conditions** Fountain Avenue Spaulding Ave Same as Existing Conditions 3. Gardner Street & Fountain Ave Fountain Avenue Gardner St 4 Fairfax Avenue & Same as Santa Monica Blvd **Existing Conditions** Santa Monica Boulevard Fairfax Ave Same as Existing Conditions 5. Genesee Avenue & Santa Monica Blvd Santa Monica Boulevard Genesee Ave Spaulding Ave\* Same as

\*Spaulding Ave is closed between Santa Monica Blvd and the alley during the morning peak period.

Santa Monica Blvd

**Existing Conditions** 



#### LEGEND

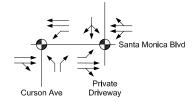
Traffic Signal

- Stop Sign
- ♦ Buses & Right-turns Only, Peak Hours

## EXISTING CONDITIONS (YEAR 2018)

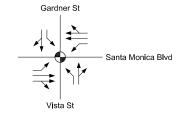
## FUTURE CONDITIONS (YEAR 2022)

7. Curson Avenue & Santa Monica Boulevard



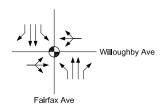
Same as Existing Conditions

8. Gardner St / Vista St & Santa Monica Boulevard



Same as Existing Conditions

9. Fairfax Avenue & Willoughby Avenue



Same as Existing Conditions

## Appendix C Traffic Counts

## **Turning Movement Count Report AM**

Location ID: 1

North/South: Fairfax Avenue Date: 09/11/18

	9	Southbound	d	1	Westbound	1	^	Vorthbound	d		Eastbouna	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	74	164	2	7	260	45	10	90	6	11	48	14	731
7:15	72	189	9	9	295	50	9	113	10	18	80	15	869
7:30	94	192	9	9	273	74	6	136	12	10	80	37	932
7:45	90	219	16	15	271	70	10	150	22	18	130	26	1037
8:00	91	187	10	15	252	74	10	143	23	40	116	25	986
8:15	76	182	20	15	265	41	13	156	30	49	178	34	1059
8:30	89	175	12	14	292	56	9	176	26	12	169	23	1053
8:45	83	182	16	20	265	60	7	153	33	8	168	29	1024
Total Volume:	669	1490	94	104	2173	470	74	1117	162	166	969	203	7691
Approach %	30%	66%	4%	4%	79%	17%	5%	83%	12%	12%	72%	15%	

Peak Hr Begin:	7:45												
PHV	346	763	58	59	1080	241	42	625	101	119	593	108	4135
PHF		0.898			0.953			0.910			0.785		0.976

## **Turning Movement Count Report PM**

Location ID: 1

North/South: Fairfax Avenue Date: 09/11/18

	9	Southbound			Westbound	d	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	46	155	14	28	172	25	37	232	14	16	239	65	1043
16:15	48	154	13	24	191	24	26	226	10	28	287	69	1100
16:30	51	153	13	19	138	24	55	219	13	19	261	84	1049
16:45	44	156	15	22	201	18	36	228	10	19	247	67	1063
17:00	22	171	14	20	195	19	54	246	13	16	254	73	1097
17:15	50	173	12	28	219	36	32	232	11	20	264	54	1131
17:30	27	181	16	25	186	26	46	262	9	17	254	52	1101
17:45	42	167	12	28	215	26	28	245	13	11	295	51	1133
Total Volume:	330	1310	109	194	1517	198	314	1890	93	146	2101	515	8717

Total Volume:	330	1310	109	194	1517	198	314	1890	93	146	2101	515	8/1/
Approach %	19%	75%	6%	10%	79%	10%	14%	82%	4%	5%	76%	19%	

Peak Hr Begin:	17:00												
PHV	141	692	54	101	815	107	160	985	46	64	1067	230	4462
PHF		0.944			0.904			0.939			0.953		0.985

## **Pedestrian/Bicycle Count Report**

Location ID: 1

North/South: Fairfax Avenue Date: 09/11/18

	No	rth	Ec	ıst	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	3	0	3	0	1	0	2	0
7:15	2	3	4	0	3	0	3	2
7:30	1	0	1	1	1	0	5	2
7:45	3	1	3	0	1	2	4	1
8:00	2	1	3	0	2	0	3	0
8:15	7	0	6	0	6	0	6	1
8:30	3	0	3	0	1	0	4	0
8:45	8	1	4	0	5	0	5	0

	No	rth	Ed	ast	Soi	uth	West		
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	
16:00	5	0	3	0	1	0	1	0	
16:15	7	0	7	1	0	1	2	0	
16:30	5	1	4	2	5	0	6	1	
16:45	4	0	5	0	5	1	3	0	
17:00	2	0	2	0	9	0	7	2	
17:15	1	0	1	0	7	0	4	0	
17:30	4	0	3	0	2	0	2	1	
17:45	3	1	6	0	3	0	5	0	

## **Turning Movement Count Report AM**

Location ID: 2a

North/South: Spaulding Avenue (North Leg) 09/11/18 Date:

West Hollywood, CA East/West: Fountain Avenue City:

	9	Southbound	d	Westbound		^	Northbound	d		Eastbound	1		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOtals.
7:00	7	0	3	1	298	0	0	0	0	0	68	0	377
7:15	13	0	3	2	347	0	0	0	0	0	96	0	461
7:30	21	0	6	3	338	0	0	0	0	0	100	1	469
7:45	10	0	4	2	336	0	0	0	0	0	164	3	519
8:00	14	0	2	3	326	1	0	0	0	0	132	4	482
8:15	12	0	8	4	319	0	0	0	0	0	200	3	546
8:30	20	0	9	2	333	0	0	0	0	0	216	2	582
8:45	10	0	6	2	328	0	0	0	0	0	221	5	572
Total Volume:	107	0	41	19	2625	1	0	0	0	0	1197	18	4008

Total Volume:	107	0	41	19	2625	1	0	0	0	0	1197	18	4008
Approach %	72%	0%	28%	1%	99%	0%	0%	0%	0%	0%	99%	1%	

Peak Hr Begin:	8:00												
PHV	56	0	25	11	1306	1	0	0	0	0	769	14	2182
PHF		0.698			0.984			0.000			0.866		0.937

## **Turning Movement Count Report PM**

Location ID: 2a

North/South: Spaulding Avenue (North Leg) Date: 09/11/18

	S	outhboun	d		Westbound		I	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
16:00	5	0	9	7	238	0	0	0	0	0	287	6	552
16:15	2	0	8	6	214	0	0	0	0	0	320	4	554
16:30	8	0	10	7	207	0	0	0	0	0	310	7	549
16:45	3	0	9	10	234	0	0	0	0	0	289	9	554
17:00	8	0	7	10	240	0	0	0	0	0	300	6	571
17:15	9	0	6	7	253	0	0	0	0	0	314	8	597
17:30	4	0	12	9	254	0	0	0	0	0	308	19	606
17:45	8	0	11	17	265	0	0	0	0	0	301	19	621
Total Volume	47	Λ	72	73	1905	Λ	0	Λ	n	Λ	2/120	78	4604

Total Volume:	47	0	72	73	1905	0	0	0	0	0	2429	78	4604
Approach %	39%	0%	61%	4%	96%	0%	0%	0%	0%	0%	97%	3%	

Peak Hr Begin:	17:00												
PHV	29	0	36	43	1012	0	0	0	0	0	1223	52	2395
PHF		0.855			0.935			0.000			0.975		0.964

## **Pedestrian/Bicycle Count Report**

Location ID: 2a

North/South: Spaulding Avenue (North Leg) Date: 09/11/18

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	1	0	0	0	0	0	0	0
7:15	1	0	0	0	0	0	3	0
7:30	1	0	0	0	0	0	0	0
7:45	2	0	0	0	0	0	2	0
8:00	2	0	0	0	0	0	2	0
8:15	2	0	0	0	0	0	1	0
8:30	2	0	0	0	0	0	2	0
8:45	2	0	0	0	0	0	2	0

	No	rth	Ec	ıst	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	1	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	1	0
16:30	1	0	0	0	0	0	4	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	3	0
17:15	0	0	0	0	0	0	6	0
17:30	1	0	0	0	0	0	4	0
17:45	2	0	0	0	0	0	5	0

## **Turning Movement Count Report AM**

Location ID: 2b

North/South: Spaulding Avenue (South Leg) 09/11/18 Date:

West Hollywood, CA East/West: Fountain Avenue City:

	,	Southbound	d		Westbound	l	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOtals.
7:00	0	0	0	0	301	1	5	0	2	3	70	0	382
7:15	0	0	0	0	334	0	2	0	4	1	97	0	438
7:30	0	0	0	0	320	4	2	0	9	3	103	0	441
7:45	0	0	0	0	329	6	3	0	3	5	156	0	502
8:00	0	0	0	0	327	9	4	0	7	3	142	0	492
8:15	0	0	0	0	322	5	2	0	12	8	200	0	549
8:30	0	0	0	0	330	7	2	0	3	6	214	0	562
8:45	0	0	0	0	329	7	5	0	6	2	225	0	574
Total Volume:	0	0	0	0	2592	39	25	0	46	31	1207	0	3940

Total Volume:	0	0	0	0	2592	39	25	0	46	31	1207	0	3940
Approach %	0%	0%	0%	0%	99%	1%	35%	0%	65%	3%	97%	0%	

Peak	( Hr Begin:	8:00												
	PHV	0	0	0	0	1308	28	13	0	28	19	781	0	2177
	PHF		0.000			0.991			0.732			0.881		0.948

## **Turning Movement Count Report PM**

Location ID: 2b

North/South: Spaulding Avenue (South Leg) Date: 09/11/18

		Southboun	d		Westbound		/	Vorthbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	0	0	0	0	233	6	4	0	14	3	287	0	547
16:15	0	0	0	0	218	3	7	0	14	8	321	0	571
16:30	0	0	0	0	188	9	9	0	18	5	306	0	535
16:45	0	0	0	0	236	8	5	0	11	6	289	0	555
17:00	0	0	0	0	230	6	6	0	17	5	295	0	559
17:15	0	0	0	0	236	2	5	0	23	7	320	0	593
17:30	0	0	0	0	239	5	10	0	17	9	309	0	589
17:45	0	0	0	0	258	5	15	0	22	11	303	0	614
Total Volume:	0	0	0	0	1838	44	61	0	136	54	2430	0	4563

Total Volume:	0	0	0	0	1838	44	61	0	136	54	2430	0	4563
Approach %	0%	0%	0%	0%	98%	2%	31%	0%	69%	2%	98%	0%	

Peak Hr Begin:	17:00												
PHV	0	0	0	0	963	18	36	0	79	32	1227	0	2355
PHF		0.000		0.933			0.777			0.963			0.959

## **Pedestrian/Bicycle Count Report**

Location ID: 2b

North/South: Spaulding Avenue (South Leg) Date: 09/11/18

	North		Ec	ıst	So	uth	West	
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	3	0	0	0
7:15	0	0	1	0	2	0	0	0
7:30	0	0	3	0	0	0	0	0
7:45	0	0	5	0	4	0	0	0
8:00	0	0	1	0	1	0	0	0
8:15	0	0	1	0	1	0	0	0
8:30	0	0	1	0	1	0	0	0
8:45	0	0	2	1	1	0	1	0

	North		Ea	ıst	Soi	uth	West	
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	1	0	1	0	0	0
16:15	0	0	2	0	2	1	0	0
16:30	0	0	3	0	4	0	0	1
16:45	0	0	1	0	0	1	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	1	0	2	0	0	0
17:30	0	0	4	1	0	2	1	0
17:45	0	0	3	0	0	0	1	1

Location ID: 3

North/South: Gardner Street Date: 09/11/18

East/West: Fountain Avenue City: West Hollywood, CA

	9	Southbound	d		Westbound	1	1	Northbound	d		Eastbound	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	11	12	5	2	271	15	7	9	2	3	69	1	407
7:15	16	16	5	6	316	15	10	24	5	6	88	3	510
7:30	13	26	7	7	314	13	8	17	7	6	99	3	520
7:45	13	45	10	10	287	26	11	30	11	14	146	11	614
8:00	25	38	9	6	269	17	13	38	3	4	133	11	566
8:15	10	48	12	2	282	23	18	33	9	11	183	4	635
8:30	20	53	21	4	289	18	12	25	11	9	205	8	675
8:45	20	69	10	10	283	26	10	32	6	11	205	7	689
Total Volume:	128	307	79	47	2311	153	89	208	54	64	1128	48	4616
Approach %	25%	60%	15%	2%	92%	6%	25%	59%	15%	5%	91%	4%	

Peak Hr Begin:	8:00												
PHV	75	208	52	22	1123	84	53	128	29	35	726	30	2565
PHF		0.846			0.963			0.875			0.887		0.931

Location ID: 3

North/South: Gardner Street Date: 09/11/18

East/West: Fountain Avenue City: West Hollywood, CA

	,	Southbound	d		Westbound	1	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOLAIS.
16:00	3	34	13	5	221	23	9	23	9	6	269	19	634
16:15	9	33	16	14	187	24	13	35	8	11	291	19	660
16:30	6	29	14	9	193	22	16	37	11	12	277	16	642
16:45	6	44	8	11	221	20	14	34	12	9	270	12	661
17:00	7	42	12	19	218	24	13	43	13	16	247	17	671
17:15	9	37	12	10	210	21	19	53	16	5	303	22	717
17:30	6	40	15	13	231	27	12	52	7	12	276	27	718
17:45	9	42	13	17	237	33	13	65	16	9	278	18	750
Total Volume:	55	301	103	98	1718	194	109	342	92	80	2211	150	5453

Total Volume:	55	301	103	98	1718	194	109	342	92	80	2211	150	5453
Approach %	12%	66%	22%	5%	85%	10%	20%	63%	17%	3%	91%	6%	

Peak Hr Begin:	17:00												
PHV	31	161	52	59	896	105	57	213	52	42	1104	84	2856
PHF		0.953			0.923			0.856			0.932		0.952

Location ID: 3

North/South: Gardner Street Date: 09/11/18

East/West: Fountain Avenue City: West Hollywood, CA

	No	rth	Ec	ıst	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	5	0	0	0	3	0	6	0
7:15	3	0	3	0	4	0	6	0
7:30	1	0	5	0	6	0	4	0
7:45	5	0	9	0	1	1	4	0
8:00	8	1	8	0	1	0	4	1
8:15	4	0	9	0	3	1	10	1
8:30	5	0	10	0	1	0	6	0
8:45	6	0	5	0	1	0	5	1

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

Location ID:

North/South: Fairfax Avenue

East/West: Santa Monica Boulevard

Date: 09/11/18

City: West Hollywood, CA

	·,	Southbound	d		Westbound	1	1	Northbound	d		Eastbouna		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
7:00	34	140	5	8	291	55	13	79	20	16	98	27	786
7:15	20	191	11	9	295	36	21	106	16	16	105	31	857
7:30	25	183	11	10	278	66	20	105	18	18	137	29	900
7:45	30	150	6	11	273	76	33	148	27	11	155	39	959
8:00	14	175	16	16	291	70	20	129	30	17	150	31	959
8:15	15	181	27	10	252	75	28	172	38	19	151	45	1013
8:30	11	186	23	20	204	102	18	154	20	12	188	34	972
8:45	24	167	17	18	242	79	24	155	29	23	176	31	985

Total Volume:	173	1373	116	102	2126	559	177	1048	198	132	1160	267	7431
Approach %	10%	83%	7%	4%	76%	20%	12%	74%	14%	8%	74%	17%	

Peak Hr Begin:	8:00												
PHV	64	709	83	64	989	326	90	610	117	71	665	141	3929
PHF		0.960			0.914			0.858			0.937		0.970

Location ID: 4

North/South: Fairfax Avenue Date: 09/11/18

	9	Southbound	d	ļ ļ	Westbound	1	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	17	161	13	30	155	47	26	185	27	18	261	68	1008
16:15	13	137	21	17	182	47	40	161	22	27	258	63	988
16:30	19	154	22	22	156	49	26	165	14	12	260	84	983
16:45	20	131	18	31	164	46	23	166	20	18	286	88	1011
17:00	10	195	25	25	175	50	37	176	27	27	215	79	1041
17:15	14	173	26	23	174	44	35	165	12	18	311	99	1094
17:30	20	159	27	33	152	46	30	181	20	12	281	67	1028
17:45	9	136	22	25	191	49	24	155	24	20	265	93	1013
	•	•		•			•	•	•	•	•	•	•
Total Volume:	122	1246	174	206	1349	378	241	1354	166	152	2137	641	8166

Total Volume:	122	1246	174	206	1349	378	241	1354	166	152	2137	641	8166
Approach %	8%	81%	11%	11%	70%	20%	14%	77%	9%	5%	73%	22%	

Peak Hr Begin:	17:00												
PHV	53	663	100	106	692	189	126	677	83	77	1072	338	4176
PHF		0.887			0.931			0.923			0.869		0.954

Location ID: 4

North/South: Fairfax Avenue Date: 09/11/18

	No	rth	Ed	ast	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	9	0	13	0	4	0	8	0
7:15	11	1	11	0	3	0	8	1
7:30	28	0	27	1	10	1	7	0
7:45	27	2	19	2	6	0	17	0
8:00	20	0	28	0	8	1	19	0
8:15	25	1	30	0	10	0	15	0
8:30	22	1	15	0	3	1	13	0
8:45	18	1	32	1	3	0	13	2

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	24	1	26	1	10	2	19	0
16:15	25	1	21	0	4	0	17	0
16:30	20	0	26	0	12	1	20	0
16:45	13	0	25	0	2	1	21	1
17:00	22	0	24	0	8	2	23	0
17:15	34	0	26	0	2	1	33	0
17:30	23	0	30	1	2	1	22	0
17:45	18	0	26	1	5	0	18	0

Location ID: 5b

North/South: Genesee Avenue (North Leg) Date: 09/11/18

	9	Southbound	d	Westbound		^	Northboun	d		Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	11	0	1	4	338	0	0	0	0	0	120	0	474
7:15	12	0	3	6	378	0	0	0	0	0	142	0	541
7:30	23	0	6	2	362	0	0	0	0	0	159	0	552
7:45	35	0	5	4	322	0	0	0	0	0	184	2	552
8:00	25	0	4	8	356	0	0	0	0	0	190	5	588
8:15	26	0	3	5	303	0	0	0	0	0	236	1	574
8:30	27	0	8	5	301	0	0	0	0	0	222	3	566
8:45	25	0	10	4	315	0	0	0	0	0	228	7	589
Total Volume:	184	0	40	38	2675	0	0	0	0	0	1481	18	4436
Approach %	82%	0%	18%	1%	99%	0%	0%	0%	0%	0%	99%	1%	

Peak Hr Begin:	8:00												
PHV	103	0	25	22	1275	0	0	0	0	0	876	16	2317
PHF		0.914	0.914		0.891			0.000			0.941		0.983

Location ID: 5b

North/South: Genesee Avenue (North Leg) Date: 09/11/18

	9	Southbound	d	Westbound		^	Northbound	d		Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	9	0	5	15	232	0	0	0	0	0	341	18	620
16:15	9	0	11	4	225	0	0	0	0	0	302	18	569
16:30	12	0	1	1	234	0	0	0	0	0	318	14	580
16:45	11	0	6	7	230	0	0	0	0	0	300	16	570
17:00	11	0	6	10	252	0	0	0	0	0	327	23	629
17:15	12	0	4	4	221	0	0	0	0	0	328	24	593
17:30	11	0	6	11	227	0	0	0	0	0	351	36	642
17:45	14	0	6	6	244	0	0	0	0	0	270	27	567
Total Volume:	89	0	45	58	1865	0	0	0	0	0	2537	176	4770
Approach %	66%	0%	34%	3%	97%	0%	0%	0%	0%	0%	94%	6%	

rotai volume:	89	U	45	58	1865	U	U	U	U	U	2537	1/6	4//0
Approach %	66%	0%	34%	3%	97%	0%	0%	0%	0%	0%	94%	6%	

Peak Hr Begin	16:45												
PHV	45	0	22	32	930	0	0	0	0	0	1306	99	2434
PHF		0.985			0.918			0.000			0.908		0.948

Location ID: 5b

North/South: Genesee Avenue (North Leg) Date: 09/11/18

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	8	2	2	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	3	0	2	0	0	0	0	0
7:45	11	2	8	0	0	0	0	0
8:00	5	0	1	0	0	0	0	0
8:15	4	0	2	0	0	0	0	0
8:30	3	0	3	3	0	0	0	0
8:45	3	1	1	0	0	0	0	0

	No	rth	Ed	ast	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	6	3	6	2	0	0	0	0
16:15	16	0	5	1	0	0	0	0
16:30	12	2	7	1	0	0	0	0
16:45	6	0	5	0	0	0	0	0
17:00	4	0	3	0	0	0	0	0
17:15	9	1	10	0	0	0	1	0
17:30	14	0	6	0	0	0	0	0
17:45	20	1	4	1	0	0	0	0

Location ID: 5a

North/South: Genesee Avenue (South Leg) Date: 09/11/18

	,	Southboun	d	Westbound		ļ ,	Northbound	d		Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	0	0	0	0	356	1	7	0	1	0	119	0	484
7:15	0	0	0	0	368	9	1	0	3	1	139	0	521
7:30	0	0	0	0	369	6	1	0	6	1	162	0	545
7:45	0	0	0	0	335	22	10	0	4	3	170	0	544
8:00	0	0	0	0	372	12	10	0	4	3	187	0	588
8:15	0	0	0	0	313	18	5	0	5	1	230	0	572
8:30	0	0	0	0	300	13	11	0	3	3	215	0	545
8:45	0	0	0	0	298	19	9	0	11	2	230	0	569
Total Volume:	0	0	0	0	2711	100	54	0	37	14	1452	0	4368

Total Volume:	0	0	0	0	2711	100	54	0	37	14	1452	0	4368
Approach %	0%	0%	0%	0%	96%	4%	59%	0%	41%	1%	99%	0%	

Pea	ak Hr Begin:	8:00												
	PHV	0	0	0	0	1283	62	35	0	23	9	862	0	2274
	PHF		0.000			0.876			0.725			0.939		0.967

Location ID: 5a

North/South: Genesee Avenue (South Leg) Date: 09/11/18

	9	Southbound	1	ı	Westbound	1	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOLAIS.
16:00	0	0	0	0	231	10	19	0	13	7	332	0	612
16:15	0	0	0	0	228	7	9	0	7	4	326	0	581
16:30	0	0	0	0	242	13	18	0	12	4	315	0	604
16:45	0	0	0	0	233	11	18	0	12	5	301	0	580
17:00	0	0	0	0	258	8	21	0	5	7	338	0	637
17:15	0	0	0	0	219	11	21	0	10	6	335	0	602
17:30	0	0	0	0	233	5	12	0	17	4	374	0	645
17:45	0	0	0	0	252	6	13	0	7	8	285	0	571
Total Volume:	0	0	0	0	1896	71	131	0	83	45	2606	0	4832
Approach %	0%	0%	0%	0%	96%	4%	61%	0%	39%	2%	98%	0%	

Peak Hr Begir	: 16:45												
PHV	0	0	0	0	943	35	72	0	44	22	1348	0	2464
PHF		0.000			0.919			0.935			0.906		0.955

Location ID: 5a

North/South: Genesee Avenue (South Leg) Date: 09/11/18

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds Bicycle		Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	8	1	3	0
7:15	0	0	0	0	6	0	1	0
7:30	0	0	0	0	9	0	4	0
7:45	0	0	0	0	9	1	1	0
8:00	0	0	0	0	9	2	4	0
8:15	0	0	0	0	7	0	4	0
8:30	0	0	1	0	2	1	5	1
8:45	0	0	0	0	11	1	13	1

	No	rth	Ed	ast	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	18	3	8	1
16:15	0	0	1	0	30	1	20	0
16:30	0	0	0	0	18	6	11	2
16:45	0	0	0	0	14	5	10	0
17:00	0	0	0	0	13	3	5	0
17:15	0	0	0	0	14	1	14	0
17:30	0	0	0	0	15	3	7	0
17:45	0	0	0	0	16	0	16	0

Location ID: 6

North/South: Spaulding Avenue (North Leg) Date: 09/11/18

	,	Southboun	d		Westbound	1	I	Northboun	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	0	0	0	0	347	0	0	0	0	0	137	0	484
7:15	0	0	0	0	380	0	0	0	0	0	137	1	518
7:30	1	0	1	0	372	0	0	0	0	0	171	0	545
7:45	2	0	0	0	347	0	0	0	0	0	201	0	550
8:00	0	0	1	0	362	0	0	0	0	0	197	0	560
8:15	1	0	2	0	307	0	0	0	0	0	242	0	552
8:30	2	0	1	0	297	2	0	0	0	0	243	1	546
8:45	2	0	0	0	305	0	0	0	0	0	232	0	539
Total Volume:	8	0	5	0	2717	2	0	0	0	0	1560	2	4294

I	Total Volume:	8	0	5	0	2717	2	0	0	0	0	1560	2	4294
	Approach %	62%	0%	38%	0%	100%	0%	0%	0%	0%	0%	100%	0%	

Peak Hr Begin:	7:45												
PHV	5	0	4	0	1313	2	0	0	0	0	883	1	2208
PHF		0.750			0.908			0.000			0.906		0.986

Location ID: 6

North/South: Spaulding Avenue (North Leg) Date: 09/11/18

	9	Southbound	d	١	Westbound	1	^	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	5	0	5	6	228	0	0	0	0	0	322	5	571
16:15	7	0	0	8	236	0	0	0	0	0	344	4	599
16:30	9	0	1	6	229	0	0	0	0	0	289	7	541
16:45	4	0	0	3	250	0	0	0	0	0	331	3	591
17:00	8	0	2	11	242	0	0	0	0	0	320	4	587
17:15	7	0	0	13	228	0	0	0	0	0	358	3	609
17:30	6	0	2	13	236	0	0	0	0	0	345	6	608
17:45	6	0	2	4	262	0	0	0	0	0	266	18	558
Total Volume:	52	0	12	64	1911	0	0	0	0	0	2575	50	4664
Approach %	81%	0%	19%	3%	97%	0%	0%	0%	0%	0%	98%	2%	

Peak Hr Begin:	16:45												
PHV	25	0	4	40	956	0	0	0	0	0	1354	16	2395
PHF		0.725			0.984			0.000			0.949		0.983

Location ID: 6

North/South: Spaulding Avenue (North Leg) Date: 09/11/18

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds Bicycle		Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	7	2	0	0	0	0	0	0
7:15	5	0	0	0	0	0	0	0
7:30	11	1	1	0	0	0	0	0
7:45	8	2	0	0	0	0	0	0
8:00	3	0	0	0	0	0	0	0
8:15	8	0	0	0	0	0	0	0
8:30	3	0	0	0	0	0	0	0
8:45	6	0	1	0	0	0	0	0

	No	rth	Ed	ast	Soi	uth	W	est
Leg:	Peds Bicycle		Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	18	1	0	0	0	0	0	0
16:15	12	2	0	0	0	0	0	0
16:30	13	5	0	0	0	0	0	0
16:45	16	0	0	0	0	0	0	0
17:00	7	0	0	0	0	0	0	0
17:15	14	1	0	0	0	0	0	0
17:30	18	0	0	0	0	0	0	0
17:45	28	1	0	0	0	0	0	0

Location ID: 7b

PHF

North/South: Curson Avenue (North Leg) Date: 09/11/18

East/West: Santa Monica Boulevard City: West Hollywood, CA

	S	Southbound	d		Westbound	1	<b>^</b>	Northbound	d		Eastbound	1	
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOtals.
7:00	12	0	6	11	340	1	3	0	0	1	134	3	511
7:15	20	3	7	14	347	0	4	0	1	2	145	3	546
7:30	13	2	5	7	361	1	2	0	0	0	174	7	572
7:45	13	3	9	8	354	1	2	0	0	1	185	10	586
8:00	22	1	6	6	351	1	4	0	0	0	201	6	598
8:15	19	2	12	1	304	1	1	0	0	2	226	9	577
8:30	13	2	9	9	297	1	4	0	0	19	225	5	584
8:45	10	4	9	3	280	1	2	0	0	1	234	7	551
Total Volume:	122	17	63	59	2634	7	22	0	1	26	1524	50	4525
Approach %	60%	8%	31%	2%	98%	0%	96%	0%	4%	2%	95%	3%	
Peak Hr Begin:	7:45												
PHV	67	8	36	24	1306	4	11	0	0	22	837	30	2345

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0.688

0.893

0.980

0.919

0.841

Location ID: 7b

PHF

North/South: Curson Avenue (North Leg) Date: 09/11/18

East/West: Santa Monica Boulevard City: West Hollywood, CA

	S	Southbound	d		Westbound	1	1	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOTAIS.
16:00	12	1	7	23	231	0	6	0	0	4	301	21	606
16:15	14	2	11	15	230	2	3	1	0	0	337	12	627
16:30	16	3	14	27	232	2	6	1	0	10	278	4	593
16:45	17	1	13	27	236	3	5	0	0	2	315	15	634
17:00	16	2	11	23	234	0	4	0	0	0	312	12	614
17:15	10	1	7	22	224	4	7	0	1	1	340	22	639
17:30	13	1	7	17	235	1	1	0	0	1	325	24	625
17:45	14	3	10	3	254	1	2	2	0	2	248	24	563
Total Volume:	112	14	80	157	1876	13	34	4	1	20	2456	134	4901
Approach %	54%	7%	39%	8%	92%	1%	87%	10%	3%	1%	94%	5%	
Peak Hr Begin:	16:45												
PHV	56	5	38	89	929	8	17	0	1	4	1292	73	2512

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

0.563

0.943

0.983

0.964

0.798

Location ID: 7b

North/South: Curson Avenue (North Leg) Date: 09/11/18

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	1	0	8	1	2	0	0	0
7:15	2	0	4	0	4	0	0	0
7:30	4	0	6	0	7	0	0	0
7:45	0	0	9	2	6	1	0	0
8:00	3	1	4	1	13	0	0	0
8:15	5	0	11	1	2	0	0	0
8:30	6	0	7	0	5	0	0	0
8:45	8	0	8	1	14	0	0	0

	No	rth	Ed	ıst	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	7	0	18	0	16	0	0	0
16:15	11	0	23	1	16	2	0	0
16:30	4	0	19	0	10	1	0	0
16:45	2	1	12	0	18	3	0	0
17:00	6	0	6	0	14	0	0	0
17:15	4	0	11	2	27	0	0	0
17:30	7	0	15	1	13	1	0	0
17:45	6	0	24	0	14	2	0	0

Location ID: 7a

North/South: Curson Avenue (South Leg) Date: 09/11/18

	Southbound			Westbound	1	^	Northbound	d		Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
7:00	0	0	0	0	362	9	9	0	4	3	128	0	515
7:15	0	0	0	0	342	4	9	0	4	4	145	0	508
7:30	0	0	0	0	375	8	4	0	6	4	159	0	556
7:45	0	0	0	0	336	18	3	0	12	3	206	0	578
8:00	0	0	0	0	372	23	7	0	12	8	196	0	618
8:15	0	0	0	0	293	21	7	0	9	2	238	0	570
8:30	0	0	0	0	302	9	13	0	8	6	229	0	567
8:45	0	0	0	0	287	7	5	0	11	3	241	0	554
Total Volume:	0	0	0	0	2669	99	57	0	66	33	1542	0	4466
Approach %	0%	0%	0%	0%	96%	4%	46%	0%	54%	2%	98%	0%	

Peak Hr Begin:	7:45												
PHV	0	0	0	0	1303	71	30	0	41	19	869	0	2333
PHF		0.000			0.870			0.845			0.925		0.944

Location ID: 7a

North/South: Curson Avenue (South Leg) Date: 09/11/18

	9	Southbound	d		Westbound	1	/	Northbound	d		Eastbound		
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	T	L	R	Т	L	TOtals.
16:00	0	0	0	0	229	12	17	0	13	12	341	0	624
16:15	0	0	0	0	220	16	18	0	15	9	321	0	599
16:30	0	0	0	0	243	10	12	0	11	8	288	0	572
16:45	0	0	0	0	228	13	18	0	13	10	308	0	590
17:00	0	0	0	0	252	12	10	0	13	6	307	0	600
17:15	0	0	0	0	225	11	15	0	19	6	322	0	598
17:30	0	0	0	0	244	13	13	0	14	4	364	0	652
17:45	0	0	0	0	241	14	14	0	15	7	240	0	531
Total Volume:	0	0	0	0	1882	101	117	0	113	62	2491	0	4766

Total Volume:	0	0	0	0	1882	101	117	0	113	62	2491	0	4766
Approach %	0%	0%	0%	0%	95%	5%	51%	0%	49%	2%	98%	0%	

Peak Hr Beg	<b>n:</b> 16:45												
PHV	0	0	0	0	949	49	56	0	59	26	1301	0	2440
PHF		0.000			0.945			0.846			0.901		0.936

Location ID: 7a

North/South: Curson Avenue (South Leg) Date: 09/11/18

	North		Ed	ast	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	1	0	0	0	4	0
7:15	0	0	1	0	0	0	5	0
7:30	0	0	1	0	8	0	3	0
7:45	0	0	1	0	2	0	4	0
8:00	0	0	0	0	8	0	6	0
8:15	0	0	2	0	5	0	6	0
8:30	0	0	2	0	6	0	4	0
8:45	0	0	8	0	12	0	5	2

	No	rth	Ec	ıst	Soi	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	1	0	15	0	11	0
16:15	0	0	4	1	19	3	3	0
16:30	0	0	4	0	12	1	7	1
16:45	0	0	0	1	19	0	11	0
17:00	0	0	3	0	9	1	10	0
17:15	0	0	1	0	31	0	3	0
17:30	0	0	4	0	10	0	4	0
17:45	0	0	1	0	24	4	14	0

Location ID: 8

PHV

PHF

74

166

0.841

73

54

1223

0.878

North/South: Gardner Street/Vista Street Date: 09/11/18

East/West: Santa Monica Boulevard City: West Hollywood, CA

	Southbound		ı	Westbound	1	^	Northbound	d		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	Т	L	TOtals.
7:00	9	15	5	4	326	1	4	6	6	4	129	5	514
7:15	10	19	12	12	369	2	7	12	1	1	147	15	607
7:30	19	21	14	5	334	9	6	21	3	3	175	6	616
7:45	14	42	20	12	360	3	10	17	7	4	196	15	700
8:00	19	32	18	11	330	14	4	27	9	10	197	18	689
8:15	18	43	14	15	306	11	6	19	5	11	230	14	692
8:30	23	49	21	16	227	12	6	25	7	14	230	10	640
8:45	15	48	19	22	278	12	14	11	5	9	252	10	695
Total Volume:	127	269	123	97	2530	64	57	138	43	56	1556	93	5153
Approach %	24%	52%	24%	4%	94%	2%	24%	58%	18%	3%	91%	5%	
		_											
Peak Hr Begin:	7:45												

88

0.888

28

853

0.930

57

2721

0.972

39

40

26

Location ID: 8

North/South: Gardner Street/Vista Street Date: 09/11/18

	Southbound			Westbound	1	^	Northbound	d		Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	Т	L	R	Т	L	R	Т	L	R	Т	L	TOtals.
16:00	13	43	2	1	241	17	13	29	12	14	321	0	706
16:15	18	41	3	0	215	15	8	45	15	12	314	0	686
16:30	14	41	4	0	255	6	6	48	4	22	314	0	714
16:45	19	41	5	0	229	9	11	44	10	6	318	1	693
17:00	11	38	2	1	245	17	16	50	12	11	340	0	743
17:15	11	54	3	0	240	9	10	80	7	16	336	0	766
17:30	13	51	0	0	232	17	11	62	10	10	350	3	759
17:45	23	37	1	19	239	14	19	67	12	11	231	6	679
Total Volume:	122	346	20	21	1896	104	94	425	82	102	2524	10	5746
Approach %	25%	71%	4%	1%	94%	5%	16%	71%	14%	4%	96%	0%	

Peak Hr Begin:	16:45												
PHV	54	184	10	1	946	52	48	236	39	43	1344	4	2961
PHF		0.912			0.950			0.832			0.958		0.966

Location ID: 8

North/South: Gardner Street/Vista Street Date: 09/11/18

	North		Ed	ıst	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	8	2	4	0	3	2	2	0
7:15	8	1	5	0	5	2	4	1
7:30	6 0		7	0	9	0	6	0
7:45	15	2	6	0	1	1	5	1
8:00	14	0	4	0	16	0	10	0
8:15	4	0	3	0	11	0	6	0
8:30	4 0		6	2	9	1	11	0
8:45	7	1	9	1	16	0	18	0

	No	rth	Ed	ast	So	uth	W	est
Leg:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	16	0	12	0	22	1	7	0
16:15	12	0	3	1	30	1	9	0
16:30	9 0		1	0	18	2	6	2
16:45	15	0	3	1	21	4	3	0
17:00	16	0	11	0	28	1	16	0
17:15	10	0	5	2	23	3	20	0
17:30	16 0		10	0	16	2	10	1
17:45	22	0	1	0	18	0	11	2

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

## ADT Volume Report Spaulding Avenue between Norton Avenue and Lexington Avenue

Day: Tuesday, September 11, 2018

City: West Hollywood, CA

		Daily To	ntale		NB	SB	EB		W						То	tal
	<u>'</u>	Daily IC	lais		591	571	0		0						11	.62
AM	NB		SB	EB	WB	Total	PM	NB		SB		EB	,	NΒ	To	tal
00:00	4		2	EB	VVD	6	12:00	10		6		ED	'	WD	16	ıtaı
00:15	0		1			1	12:15	9		9					18	
00:30	0		3			3	12:30	7		20					27	
00:45	4	8	1	7		5 15	12:45	8	34	10	45				18	79
01:00	2		2			4	13:00	11		5					16	
01:15	1		0			1	13:15	7		5					12	
01:30	0		2			2	13:30	7		4					11	
01:45	1	4	0	4		1 8	13:45	11	36	4	18				15	54
02:00	0		0			0	14:00	8		5					13	
02:15	0		2			2	14:15	8		7					15	
02:30	0		1			1	14:30	5		10					15	
02:45	1	1	1	4		2 5	14:45	15	36	7	29				22	65
03:00	0		2			2	15:00	10		4					14	
03:15	0		0			0	15:15	7		5					12	
03:30	1	_	0	_		1	15:30	9		11					20	
03:45	0	1	0	2		0 3	15:45	6	32	12	32				18	64
04:00 04:15	0		0			0	16:00	15		6 6					21 20	
							16:15	14								
04:30 04:45	0 0	0	0 1	1		0 1 1	16:30 16:45	16 14	59	11 4	27				27 18	86
05:00	0	- 0	0			0	17:00	16	35	6	21				22	80
05:15	1		2			3	17:15	19		6					25	
05:30	1		2			3	17:30	23		8					31	
05:45	2	4	3	7		5 11	17:45	28	86	12	32				40	118
06:00	0		1			1	18:00	23		9					32	
06:15	1		4			5	18:15	16		11					27	
06:30	3		1			4	18:30	10		10					20	
06:45	2	6	5	11		7 17	18:45	20	69	5	35				25	104
07:00	2		4			6	19:00	10		9					19	
07:15	3		2			5	19:15	10		13					23	
07:30	4		7			11	19:30	11		5					16	
07:45	4	13	10	23		14 36	19:45	5	36	9	36				14	72
08:00	2		10			12	20:00	6		8					14	
08:15	3		6			9	20:15	7		9					16	
08:30	2		10			12	20:30	10		5					15	
08:45	3	10	15	41		18 51	20:45	8	31	7	29				15	60
09:00	2		12			14	21:00	1		5					6	
09:15	6		10			16	21:15	6		7					13	
09:30	6		11			17	21:30	10		6					16	
09:45	5	19	10	43		15 62	21:45	4	21	4	22				8	43
10:00	8		8			16	22:00	10		6					16	
10:15	6		12			18	22:15	2		9					11	
10:30	7	20	7	20		14	22:30	3	2.5	5	22				8	
10:45	7	28	12	39		19 67	22:45	6	21	3	23				9	44
11:00	4 9		13			17 19	23:00	0		8					8	
11:15 11:30	9 7		10 14			21	23:15	4 5		4 3					8	
11:30	5	25	6	43		11 68	23:30 23:45	2	11	3	18				5	29
Totals	3	25 119	o	225		344	Totals		472	3	346					29 <b>18</b>
Split %		34.6%		65.4%		29.6%	Split %		57.7%		42.3%					4%
Spirt 70		3070		33.770		25.070	Spir 70		37.770		72.370				, , ,	.,,,
					NB	SB	EB			WB					То	tal
		Daily To	otals		591	571	0			0						.62
AM Peak Hou	ur	10:00		10:45		10:45	PM Peak Ho	ur	17:15		12:00				17	:30
AM Peak Vol		28		49		76	PM Peak Vo		93		45					30
AM Pk Hr Fac		0.875		0.875		0.905	PM Pk Hr Fa		0.830		0.563				0.8	
							*								-	

# Appendix D Level of Service Worksheets

	۶	<b>→</b>	•	•	<b>←</b>	•	•	<b>†</b>	/	<b>/</b>	ţ	<b>√</b>
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β		ň	<b>∱</b> β		7	<b>∱</b> β		ň	<b>∱</b> ∱	
Volume (vph)	108	593	119	241	1080	59	101	625	42	58	763	346
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2942		1509	2994		1509	2989		1509	2876	
Flt Permitted	0.15	1.00		0.31	1.00		0.11	1.00		0.25	1.00	
Satd. Flow (perm)	242	2942		497	2994		176	2989		398	2876	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	624	125	254	1137	62	106	658	44	61	803	364
RTOR Reduction (vph)	0	17	0	0	4	0	0	5	0	0	47	0
Lane Group Flow (vph)	114	732	0	254	1195	0	106	697	0	61	1120	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	135	1647		278	1676		63	1076		143	1035	
v/s Ratio Prot		0.25			0.40			0.23			0.39	
v/s Ratio Perm	0.47			c0.51			c0.60			0.15		
v/c Ratio	0.84	0.44		0.91	0.71		1.68	0.65		0.43	1.08	
Uniform Delay, d1	18.4	12.9		19.8	16.1		32.0	26.7		24.2	32.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Incremental Delay, d2	44.3	0.9		35.7	2.6		365.4	3.0		9.0	53.0	
Delay (s)	62.7	13.8		55.5	18.7		397.4	29.4		33.2	85.0	
Level of Service	Е	В		Ε	В		F	С		С	F	
Approach Delay (s)		20.2			25.2			77.6			82.5	
Approach LOS		С			С			E			F	
Intersection Summary												
HCM 2000 Control Delay			50.1	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	ICM 2000 Volume to Capacity ratio											
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		104.9%	IC	CU Level	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

	<b>→</b>	•	•	<b>←</b>	4	<b>/</b>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }	LDIX	****	414	N/	NON		
Volume (vph)	781	19	28	1308	28	13		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	.020	4.0	4.0	.020		
Lane Util. Factor	0.95			0.95	1.00			
Frt	1.00			1.00	0.96			
Flt Protected	1.00			1.00	0.97			
Satd. Flow (prot)	3007			3015	1469			
Flt Permitted	1.00			0.92	0.97			
Satd. Flow (perm)	3007			2787	1469			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	822	20	29	1377	29	14		
RTOR Reduction (vph)	1	0	0	0	13	0		
Lane Group Flow (vph)	841	0	0	1406	30	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			2	4			
Permitted Phases			2					
Actuated Green, G (s)	70.2			70.2	9.2			
Effective Green, g (s)	72.8			72.8	9.2			
Actuated g/C Ratio	0.81			0.81	0.10			
Clearance Time (s)	6.6			6.6	4.0			
Vehicle Extension (s)	5.0			5.0	3.0			
Lane Grp Cap (vph)	2432			2254	150			
v/s Ratio Prot	0.28				c0.02			
v/s Ratio Perm				c0.50				
v/c Ratio	0.35			0.62	0.20			
Uniform Delay, d1	2.3			3.3	37.0			
Progression Factor	0.24			1.00	1.00			
Incremental Delay, d2	0.4			1.3	0.7			
Delay (s)	0.9			4.6	37.7			
Level of Service	А			Α	D			
Approach Delay (s)	0.9			4.6	37.7			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			3.9	H	CM 2000	Level of Service	Α	
HCM 2000 Volume to Cap			0.58					
Actuated Cycle Length (s)			90.0		um of lost		8.0	
Intersection Capacity Utiliz	ration		80.9%	IC	CU Level c	of Service	D	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	, j	<b>∱</b> }		¥	<b>↑</b> ↑			र्स	7		4	
Volume (vph)	30	726	35	84	1123	22	29	128	53	52	208	75
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	2997		1509	3009			1574	1350		1528	
Flt Permitted	0.19	1.00		0.32	1.00			0.83	1.00		0.92	
Satd. Flow (perm)	295	2997		507	3009			1312	1350		1423	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	764	37	88	1182	23	31	135	56	55	219	79
RTOR Reduction (vph)	0	4	0	0	2	0	0	0	42	0	11	0
Lane Group Flow (vph)	32	797	0	88	1203	0	0	166	14	0	342	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	196	1998		338	2006			320	330		347	
v/s Ratio Prot		0.27			c0.40							
v/s Ratio Perm	0.11			0.17				0.13	0.01		c0.24	
v/c Ratio	0.16	0.40		0.26	0.60			0.52	0.04		0.98	
Uniform Delay, d1	5.6	6.8		6.1	8.3			29.4	26.0		33.8	
Progression Factor	1.00	1.00		0.43	0.45			1.00	1.00		1.00	
Incremental Delay, d2	1.8	0.6		1.3	0.9			1.4	0.1		43.8	
Delay (s)	7.4	7.4		3.9	4.7			30.8	26.0		77.7	
Level of Service	А	Α		Α	Α			С	С		Е	
Approach Delay (s)		7.4			4.7			29.6			77.7	
Approach LOS		А			А			С			E	
Intersection Summary												
HCM 2000 Control Delay			17.1	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		90.2%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ሻ	<b>↑</b> ↑		*	<b>^</b>	7	ሻ	<b>∱</b> }	
Volume (vph)	141	665	71	326	989	64	117	610	90	83	709	64
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2974		1509	2990		1509	3018	1350	1509	2980	
Flt Permitted	0.14	1.00		0.26	1.00		0.15	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	215	2974		420	2990		244	3018	1350	352	2980	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	700	75	343	1041	67	123	642	95	87	746	67
RTOR Reduction (vph)	0	8	0	0	5	0	0	0	60	0	7	0
Lane Group Flow (vph)	148	767	0	343	1103	0	123	642	35	87	806	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	53.1	46.3		53.5	46.5		34.0	27.0	27.0	30.7	25.6	
Effective Green, g (s)	51.1	46.3		51.5	46.5		32.0	27.1	27.1	29.7	25.7	
Actuated g/C Ratio	0.51	0.46		0.52	0.46		0.32	0.27	0.27	0.30	0.26	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	184	1376		281	1390		153	817	365	157	765	
v/s Ratio Prot	0.05	0.26		c0.07	0.37		c0.05	0.21		0.03	c0.27	
v/s Ratio Perm	0.36			c0.55			0.21		0.03	0.14		
v/c Ratio	0.80	0.56		1.22	0.79		0.80	0.79	0.10	0.55	1.05	
Uniform Delay, d1	16.9	19.4		23.0	22.7		27.6	33.8	27.3	27.0	37.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.60	0.67	
Incremental Delay, d2	20.8	1.6		127.0	4.7		34.6	7.5	0.5	2.2	46.1	
Delay (s)	37.7	21.1		150.0	27.4		62.3	41.3	27.8	18.3	71.2	
Level of Service	D	С		F	С		E	D	С	В	Ε	
Approach Delay (s)		23.7			56.4			42.8			66.1	
Approach LOS		С			E			D			E	
Intersection Summary												
HCM 2000 Control Delay 48. HCM 2000 Volume to Capacity ratio 1.1				Н	CM 2000	Level of	Service		D			
	ICM 2000 Volume to Capacity ratio											
Actuated Cycle Length (s)			100.0		um of lost				16.0			
	ntersection Capacity Utilization		91.7%	IC	CU Level of	of Service	9		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations	ሻ	<b>^</b>	ħβ		W				
Volume (vph)	16	876	1275	22	25	103			
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620			
Total Lost time (s)	4.0	4.0	4.0		4.0				
Lane Util. Factor	1.00	0.95	0.95		1.00				
Frt	1.00	1.00	1.00		0.89				
Flt Protected	0.95	1.00	1.00		0.99				
Satd. Flow (prot)	1509	3018	3010		1402				
Flt Permitted	0.17	1.00	1.00		0.99				
Satd. Flow (perm)	262	3018	3010		1402				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	17	952	1386	24	27	112			
RTOR Reduction (vph)	0	0	1	0	68	0			
Lane Group Flow (vph)	17	952	1409	0	71	0			
	Perm	NA	NA		Prot				
Protected Phases		2	6		4				
Permitted Phases	2								
Actuated Green, G (s)	81.3	81.3	81.3		12.2				
Effective Green, g (s)	80.8	80.8	80.8		12.7				
Actuated g/C Ratio	0.80	0.80	0.80		0.13				
Clearance Time (s)	3.5	3.5	3.5		4.5				
Vehicle Extension (s)	0.2	0.2	0.2		3.0				
Lane Grp Cap (vph)	208	2402	2396		175				
v/s Ratio Prot		0.32	c0.47		c0.05				
v/s Ratio Perm	0.06								
ı/c Ratio	0.08	0.40	0.59		0.40				
Uniform Delay, d1	2.3	3.1	4.0		40.9				
Progression Factor	0.32	0.25	1.00		1.00				
Incremental Delay, d2	0.7	0.5	1.1		1.5				
Delay (s)	1.4	1.2	5.0		42.4				
Level of Service	Α	Α	Α		D				
Approach Delay (s)		1.2	5.0		42.4				
Approach LOS		Α	Α		D				
Intersection Summary									
HCM 2000 Control Delay			5.6	Н	CM 2000	Level of Servic	е	Α	
HCM 2000 Volume to Capacity	ratio		0.56						
Actuated Cycle Length (s)			101.5	Sı	um of lost	time (s)		8.0	
Intersection Capacity Utilization	1		57.9%	IC	U Level c	of Service		В	
Analysis Period (min)			15						
c Critical Lane Group									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> ∱			<b>€1</b> }						4	
Volume (vph)	30	837	22	4	1306	24	0	0	0	36	8	67
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			1.00						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3006			3009						1434	
Flt Permitted	0.16	1.00			0.95						0.98	
Satd. Flow (perm)	256	3006			2869						1434	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	33	910	23	4	1420	26	0	0	0	39	8	73
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	0	0	63	0
Lane Group Flow (vph)	33	932	0	0	1449	0	0	0	0	0	57	0
Turn Type	Perm	NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases	2			6						4		
Actuated Green, G (s)	81.6	81.6			81.6						9.9	
Effective Green, g (s)	81.6	81.6			81.6						9.9	
Actuated g/C Ratio	0.82	0.82			0.82						0.10	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	208	2452			2341						141	
v/s Ratio Prot		0.31										
v/s Ratio Perm	0.13				c0.51						0.04	
v/c Ratio	0.16	0.38			0.62						0.40	
Uniform Delay, d1	1.9	2.5			3.4						42.3	
Progression Factor	0.27	0.24			0.59						1.00	
Incremental Delay, d2	1.5	0.4			1.0						1.9	
Delay (s)	2.0	1.0			3.0						44.2	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.1			3.0			0.0			44.2	
Approach LOS		Α			Α			А			D	
Intersection Summary												
HCM 2000 Control Delay			4.2	Н	CM 2000	Level of S	Service		А			
HCM 2000 Volume to Capac	ity ratio		0.60									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizati	ion		61.2%	IC	CU Level of	of Service			В			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	<b>∱</b> β		¥	<b>∱</b> }		¥	f)		¥	ĵ»	
Volume (vph)	57	853	39	40	1223	54	28	88	26	73	166	74
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2998		1509	2998		1509	1535		1509	1515	
Flt Permitted	0.16	1.00		0.28	1.00		0.34	1.00		0.62	1.00	
Satd. Flow (perm)	257	2998		437	2998		539	1535		992	1515	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	60	898	41	42	1287	57	29	93	27	77	175	78
RTOR Reduction (vph)	0	3	0	0	2	0	0	12	0	0	18	0
Lane Group Flow (vph)	60	936	0	42	1342	0	29	108	0	77	235	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	71.4	71.4		71.4	71.4		20.6	20.6		20.6	20.6	
Effective Green, g (s)	71.4	71.4		71.4	71.4		20.6	20.6		20.6	20.6	
Actuated g/C Ratio	0.71	0.71		0.71	0.71		0.21	0.21		0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	183	2140		312	2140		111	316		204	312	
v/s Ratio Prot		0.31			c0.45			0.07			c0.15	
v/s Ratio Perm	0.23			0.10			0.05			0.08		
v/c Ratio	0.33	0.44		0.13	0.63		0.26	0.34		0.38	0.75	
Uniform Delay, d1	5.3	5.9		4.5	7.4		33.3	33.9		34.2	37.3	
Progression Factor	0.64	0.67		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.5	0.6		0.9	1.4		1.3	0.7		1.2	9.8	
Delay (s)	7.9	4.6		5.4	8.8		34.6	34.6		35.4	47.1	
Level of Service	Α	Α		Α	Α		С	С		D	D	
Approach Delay (s)		4.8			8.7			34.6			44.4	
Approach LOS		Α			Α			С			D	
Intersection Summary												
HCM 2000 Control Delay	ICM 2000 Control Delay			Н	CM 2000	Level of S	Service		В			
ICM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		84.4%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	4	4	<b>†</b>	~	<b>/</b>	<b>+</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	<b>ተ</b> ኈ		ሻ	<b>∱</b> ∱	
Volume (vph)	50	60	31	150	259	40	67	731	23	31	1095	43
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.97			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1514			1543		1509	3004		1509	3001	
Flt Permitted		0.82			0.84		0.24	1.00		0.28	1.00	
Satd. Flow (perm)		1263			1313		387	3004		452	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	63	33	158	273	42	71	769	24	33	1153	45
RTOR Reduction (vph)	0	13	0	0	9	0	0	5	0	0	7	0
Lane Group Flow (vph)	0	136	0	0	464	0	71	788	0	33	1191	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.6			15.6		16.4	16.4		16.4	16.4	
Effective Green, g (s)		15.6			15.6		16.4	16.4		16.4	16.4	
Actuated g/C Ratio		0.39			0.39		0.41	0.41		0.41	0.41	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		492			512		158	1231		185	1230	
v/s Ratio Prot								0.26			c0.40	
v/s Ratio Perm		0.11			c0.35		0.18			0.07		
v/c Ratio		0.28			0.91		0.45	0.64		0.18	0.97	
Uniform Delay, d1		8.3			11.5		8.5	9.4		7.5	11.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			19.5		9.0	2.6		2.1	19.1	
Delay (s)		8.6			31.0		17.5	12.0		9.6	30.6	
Level of Service		Α			С		В	В		Α	С	
Approach Delay (s)		8.6			31.0			12.4			30.1	
Approach LOS		Α			С			В			С	
Intersection Summary												
HCM 2000 Control Delay			23.5	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capacit	y ratio		0.94									
Actuated Cycle Length (s)			40.0		um of lost				8.0			
Intersection Capacity Utilization	on		86.7%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

	٠	<b>→</b>	←	•	<b>\</b>	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	ħβ		W	-	
Volume (vph)	14	769	1306	11	25	56	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	1.00		0.91		
Flt Protected		1.00	1.00		0.98		
Satd. Flow (prot)		3015	3014		1418		
Flt Permitted		0.92	1.00		0.98		
Satd. Flow (perm)		2766	3014		1418		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	15	836	1420	12	27	61	
RTOR Reduction (vph)	0	0	0	0	55	0	
Lane Group Flow (vph)	0	851	1432	0	33	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		70.2	70.2		9.2		
Effective Green, g (s)		72.8	72.8		9.2		
Actuated g/C Ratio		0.81	0.81		0.10		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		2237	2437		144		
v/s Ratio Prot			c0.48		c0.02		
v/s Ratio Perm		0.31					
v/c Ratio		0.38	0.59		0.23		
Uniform Delay, d1		2.4	3.1		37.1		
Progression Factor		1.00	0.18		1.00		
Incremental Delay, d2		0.5	8.0		0.8		
Delay (s)		2.9	1.4		38.0		
Level of Service		А	Α		D		
Approach Delay (s)		2.9	1.4		38.0		
Approach LOS		А	A		D		
Intersection Summary							
HCM 2000 Control Delay			3.3	H	CM 2000	Level of Service	
HCM 2000 Volume to Capac	city ratio		0.55				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utilizat	tion		57.8%	IC	U Level c	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

Movement         EBT         EBR         WBL         WBT         NBL         NBR           Jane Configurations         11         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1
Anne Configurations
Volume (vph)       862       9       62       1283       23       35         deal Flow (vphpl)       1620       1620       1620       1620       1620         Fotal Lost time (s)       4.0       4.0       4.0       4.0         Lane Util. Factor       0.95       1.00       0.95       1.00         Fit       1.00       1.00       0.92       1.00       0.92         Fit Protected       1.00       0.95       1.00       0.98       0.98         Satd. Flow (prot)       3013       1509       3018       1431         Fit Permitted       1.00       0.29       1.00       0.98         Satd. Flow (perm)       3013       456       3018       1431         Peak-hour factor, PHF       0.92       0.92       0.92       0.92         Adj. Flow (vph)       937       10       67       1395       25       38         RTOR Reduction (vph)       0       0       0       0       333       0         Lane Group Flow (vph)       947       0       67       1395       30       0         Furn Type       NA       Perm       NA       Prot
deal Flow (vphpl)         1620         1620         1620         1620         1620         1620           Fotal Lost time (s)         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0         4.0
Fotal Lost time (s)       4.0       4.0       4.0       4.0         Lane Util. Factor       0.95       1.00       0.95       1.00         Fit       1.00       1.00       1.00       0.92         Fit Protected       1.00       0.95       1.00       0.98         Satd. Flow (prot)       3013       1509       3018       1431         Fit Permitted       1.00       0.29       1.00       0.98         Satd. Flow (perm)       3013       456       3018       1431         Peak-hour factor, PHF       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       937       10       67       1395       25       38         RTOR Reduction (vph)       0       0       0       33       0         Lane Group Flow (vph)       947       0       67       1395       30       0         Furn Type       NA       Perm       NA       Prot
Lane Util. Factor       0.95       1.00       0.95       1.00         Frt       1.00       1.00       1.00       0.92         Fit Protected       1.00       0.95       1.00       0.98         Satd. Flow (prot)       3013       1509       3018       1431         Fit Permitted       1.00       0.29       1.00       0.98         Satd. Flow (perm)       3013       456       3018       1431         Peak-hour factor, PHF       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       937       10       67       1395       25       38         RTOR Reduction (vph)       0       0       0       33       0         Lane Group Flow (vph)       947       0       67       1395       30       0         Turn Type       NA       Perm       NA       Prot
Fit 1.00 1.00 1.00 0.92  Fit Protected 1.00 0.95 1.00 0.98  Satd. Flow (prot) 3013 1509 3018 1431  Fit Permitted 1.00 0.29 1.00 0.98  Satd. Flow (perm) 3013 456 3018 1431  Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92 0.92  Adj. Flow (vph) 937 10 67 1395 25 38  RTOR Reduction (vph) 0 0 0 0 33 0  Lane Group Flow (vph) 947 0 67 1395 30 0  Furn Type NA Perm NA Prot
Fit Protected 1.00 0.95 1.00 0.98 Satd. Flow (prot) 3013 1509 3018 1431 Fit Permitted 1.00 0.29 1.00 0.98 Satd. Flow (perm) 3013 456 3018 1431 Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92 0.92 Adj. Flow (vph) 937 10 67 1395 25 38 RTOR Reduction (vph) 0 0 0 0 33 0 Lane Group Flow (vph) 947 0 67 1395 30 0 Furn Type NA Perm NA Prot
Satd. Flow (prot)     3013     1509     3018     1431       Fit Permitted     1.00     0.29     1.00     0.98       Satd. Flow (perm)     3013     456     3018     1431       Peak-hour factor, PHF     0.92     0.92     0.92     0.92     0.92       Adj. Flow (vph)     937     10     67     1395     25     38       RTOR Reduction (vph)     0     0     0     33     0       Lane Group Flow (vph)     947     0     67     1395     30     0       Furn Type     NA     Perm     NA     Prot
Fit Permitted 1.00 0.29 1.00 0.98 Satd. Flow (perm) 3013 456 3018 1431  Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92 0.92 Adj. Flow (vph) 937 10 67 1395 25 38  RTOR Reduction (vph) 0 0 0 0 33 0  Lane Group Flow (vph) 947 0 67 1395 30 0  Furn Type NA Perm NA Prot
Satd. Flow (perm)       3013       456       3018       1431         Peak-hour factor, PHF       0.92       0.92       0.92       0.92         Adj. Flow (vph)       937       10       67       1395       25       38         RTOR Reduction (vph)       0       0       0       33       0         Lane Group Flow (vph)       947       0       67       1395       30       0         Turn Type       NA       Perm       NA       Prot
Peak-hour factor, PHF       0.92       0.92       0.92       0.92       0.92         Adj. Flow (vph)       937       10       67       1395       25       38         RTOR Reduction (vph)       0       0       0       33       0         Lane Group Flow (vph)       947       0       67       1395       30       0         Furn Type       NA       Perm       NA       Prot
Adj. Flow (vph) 937 10 67 1395 25 38  RTOR Reduction (vph) 0 0 0 0 33 0  Lane Group Flow (vph) 947 0 67 1395 30 0  Furn Type NA Perm NA Prot
RTOR Reduction (vph) 0 0 0 0 33 0  Lane Group Flow (vph) 947 0 67 1395 30 0  Furn Type NA Perm NA Prot
Lane Group Flow (vph)         947         0         67         1395         30         0           Furn Type         NA         Perm         NA         Prot
Turn Type NA Perm NA Prot
Permitted Phases 6
Actuated Green, G (s) 81.3 81.3 12.2
Effective Green, g (s) 80.8 80.8 12.7
Actuated g/C Ratio 0.80 0.80 0.80 0.13
Clearance Time (s) 3.5 3.5 4.5
/ehicle Extension (s) 0.2 0.2 0.2 3.0
ane Grp Cap (vph) 2398 363 2402 179
//s Ratio Prot 0.31 c0.46 c0.02
//s Ratio Perm 0.15
√c Ratio 0.39 0.18 0.58 0.17
Jniform Delay, d1 3.1 2.5 3.9 39.7
Progression Factor 1.00 0.36 0.27 1.00
ncremental Delay, d2 0.5 0.9 0.9 0.4
Delay (s) 3.6 1.8 1.9 40.1
Level of Service A A A D
Approach Delay (s) 3.6 1.9 40.1
Approach LOS A D
ntersection Summary
HCM 2000 Control Delay 3.5 HCM 2000 Level of Service A
HCM 2000 Volume to Capacity ratio 0.52
Actuated Cycle Length (s) 101.5 Sum of lost time (s) 8.0
ntersection Capacity Utilization 62.4% ICU Level of Service B
Analysis Period (min) 15
Critical Lane Group

	-	•	•	•	<b>~</b>	<i>&gt;</i>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }		ሻ	<b>^</b>	W			
Volume (vph)	869	19	71	1303	41	30		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0		4.0	4.0	4.0			
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.94			
Flt Protected	1.00		0.95	1.00	0.97			
Satd. Flow (prot)	3008		1509	3018	1456			
Flt Permitted	1.00		0.28	1.00	0.97			
Satd. Flow (perm)	3008		452	3018	1456			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	945	21	77	1416	45	33		
RTOR Reduction (vph)	1	0	0	0	30	0		
Lane Group Flow (vph)	965	0	77	1416	48	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	8			
Permitted Phases	<del>-</del>		6	_	-			
Actuated Green, G (s)	81.6		81.6	81.6	10.4			
Effective Green, g (s)	81.6		81.6	81.6	10.4			
Actuated g/C Ratio	0.82		0.82	0.82	0.10			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2454		368	2462	151			
v/s Ratio Prot	0.32			c0.47	c0.03			
v/s Ratio Perm			0.17					
v/c Ratio	0.39		0.21	0.58	0.32			
Uniform Delay, d1	2.5		2.0	3.2	41.5			
Progression Factor	1.00		0.27	0.19	1.00			
Incremental Delay, d2	0.5		1.0	0.8	1.2			
Delay (s)	3.0		1.6	1.4	42.8			
Level of Service	А		Α	Α	D			
Approach Delay (s)	3.0			1.4	42.8			
Approach LOS	Α			А	D			
Intersection Summary								
HCM 2000 Control Delay			3.3	Н	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capa	acity ratio		0.55					
Actuated Cycle Length (s)			100.0		um of lost		8.5	
Intersection Capacity Utiliza	ation		60.4%	IC	CU Level o	of Service	В	
Analysis Period (min)			15					
c Critical Lane Group								

	٠	<b>→</b>	+	4	<b>\</b>	4
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4₽	<b>↑</b> ↑		W	
Volume (veh/h)	1	883	1313	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	960	1427	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1427				1909	714
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1427				1909	714
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	472				60	374
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	321	640	951	476	0	
Volume Left	1	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	472	1700	1700	1700	1700	
Volume to Capacity	0.00	0.38	0.56	0.28	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.1	0.0	0.0	0.0	0.0	
Lane LOS	А				Α	
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS					А	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utiliz	zation		45.9%	IC	U Level o	f Service
Analysis Period (min)			15			

	۶	<b>→</b>	•	•	<b>←</b>	4	4	<b>†</b>	~	<b>/</b>	<b>†</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β		ሻ	ħβ		ሻ	<b>∱</b> β		7	<b>∱</b> ∱	
Volume (vph)	230	1067	64	107	815	101	46	985	160	54	692	141
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2992		1509	2968		1509	2955		1509	2941	
Flt Permitted	0.23	1.00		0.15	1.00		0.16	1.00		0.11	1.00	
Satd. Flow (perm)	360	2992		246	2968		257	2955		176	2941	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	242	1123	67	113	858	106	48	1037	168	57	728	148
RTOR Reduction (vph)	0	4	0	0	10	0	0	13	0	0	17	0
Lane Group Flow (vph)	242	1186	0	113	954	0	48	1192	0	57	859	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	201	1675		137	1662		92	1063		63	1058	
v/s Ratio Prot		0.40			0.32			c0.40			0.29	
v/s Ratio Perm	c0.67			0.46			0.19			0.32		
v/c Ratio	1.20	0.71		0.82	0.57		0.52	1.12		0.90	0.81	
Uniform Delay, d1	22.0	16.0		18.0	14.3		25.2	32.0		30.4	28.9	
Progression Factor	1.00	1.00		1.00	1.00		0.93	0.95		1.00	1.00	
Incremental Delay, d2	129.3	2.6		40.8	1.4		19.5	67.3		88.5	6.8	
Delay (s)	151.3	18.6		58.8	15.7		42.9	97.6		118.9	35.7	
Level of Service	F	В		E	В		D	F		F	D	
Approach Delay (s)		41.0			20.2			95.5			40.8	
Approach LOS		D			С			F			D	
Intersection Summary												
HCM 2000 Control Delay			50.7	H	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	city ratio		1.17									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		104.9%	IC	U Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

	-	•	•	•	•	~	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>↑</b> ↑			414	**		
Volume (vph)	1227	32	18	963	79	36	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)	4.0			4.0	4.0		
Lane Util. Factor	0.95			0.95	1.00		
Frt	1.00			1.00	0.96		
Flt Protected	1.00			1.00	0.97		
Satd. Flow (prot)	3006			3015	1470		
Flt Permitted	1.00			0.91	0.97		
Satd. Flow (perm)	3006			2758	1470		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	1292	34	19	1014	83	38	
RTOR Reduction (vph)	2	0	0	0	20	0	
Lane Group Flow (vph)	1324	0	0	1033	101	0	
Turn Type	NA		Perm	NA	Prot		
Protected Phases	2			2	4		
Permitted Phases			2				
Actuated Green, G (s)	67.1			67.1	12.3		
Effective Green, g (s)	69.7			69.7	12.3		
Actuated g/C Ratio	0.77			0.77	0.14		
Clearance Time (s)	6.6			6.6	4.0		
Vehicle Extension (s)	5.0			5.0	3.0		
Lane Grp Cap (vph)	2327			2135	200		
v/s Ratio Prot	c0.44				c0.07		
v/s Ratio Perm				0.37			
v/c Ratio	0.57			0.48	0.51		
Uniform Delay, d1	4.1			3.7	36.0		
Progression Factor	0.19			1.00	1.00		
Incremental Delay, d2	0.7			0.8	2.0		
Delay (s)	1.5			4.4	38.0		
Level of Service	Α			A	D		
Approach Delay (s)	1.5			4.4	38.0		
Approach LOS	Α			Α	D		
Intersection Summary							
HCM 2000 Control Delay			4.5	H	CM 2000	Level of Service	
HCM 2000 Volume to Capa	city ratio		0.56				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utiliza	ition		61.2%	IC	U Level c	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	/	<b>/</b>	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>†</b> }		ň	<b>∱</b> }			4	7		4	
Volume (vph)	84	1104	42	105	896	59	52	213	57	52	161	31
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	3001		1509	2990			1573	1350		1544	
Flt Permitted	0.24	1.00		0.19	1.00			0.84	1.00		0.68	
Satd. Flow (perm)	389	3001		294	2990			1337	1350		1063	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	1162	44	111	943	62	55	224	60	55	169	33
RTOR Reduction (vph)	0	3	0	0	5	0	0	0	45	0	6	0
Lane Group Flow (vph)	88	1203	0	111	1000	0	0	279	15	0	251	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	259	2000		196	1993			326	330		259	
v/s Ratio Prot		c0.40			0.33							
v/s Ratio Perm	0.23			0.38				0.21	0.01		c0.24	
v/c Ratio	0.34	0.60		0.57	0.50			0.86	0.04		0.97	
Uniform Delay, d1	6.5	8.3		8.0	7.5			32.5	26.0		33.7	
Progression Factor	1.00	1.00		0.70	0.46			1.00	1.00		1.00	
Incremental Delay, d2	3.5	1.3		8.1	0.6			19.2	0.1		46.7	
Delay (s)	10.0	9.7		13.7	4.1			51.7	26.0		80.4	
Level of Service	Α	Α		В	Α			D	С		F	
Approach Delay (s)		9.7			5.1			47.2			80.4	
Approach LOS		Α			Α			D			F	
Intersection Summary												
HCM 2000 Control Delay			18.3	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.70									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		91.1%	IC	CU Level of	of Service	!		F			
Analysis Period (min)			15									
c Critical Lane Group												

	•	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	•	<b>†</b>	/	<b>&gt;</b>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ĭ	<b>∱</b> }		¥	<b>∱</b> }		¥	<b>^</b>	7	7	<b>∱</b> }	
Volume (vph)	338	1072	77	189	692	106	83	677	126	100	663	53
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2987		1509	2957		1509	3018	1350	1509	2984	
Flt Permitted	0.24	1.00		0.11	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	380	2987		169	2957		263	3018	1350	260	2984	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	1128	81	199	728	112	87	713	133	105	698	56
RTOR Reduction (vph)	0	5	0	0	12	0	0	0	66	0	6	0
Lane Group Flow (vph)	356	1204	0	199	828	0	87	713	67	105	748	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		32.2	25.2	25.2	31.1	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		30.2	25.3	25.3	30.1	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	265	1403		168	1389		154	763	341	149	746	
v/s Ratio Prot	c0.08	0.40		0.07	0.28		0.03	0.24		c0.04	c0.25	
v/s Ratio Perm	c0.62			0.54			0.14		0.05	0.17		
v/c Ratio	1.34	0.86		1.18	0.60		0.56	0.93	0.20	0.70	1.00	
Uniform Delay, d1	22.5	23.5		18.7	19.5		27.5	36.5	29.3	27.6	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.70	0.63	
Incremental Delay, d2	177.6	7.0		127.7	1.9		14.2	20.0	1.3	10.6	31.9	
Delay (s)	200.1	30.5		146.5	21.4		41.7	56.6	30.6	30.0	55.7	
Level of Service	F	С		F	С		D	Ε	С	С	Ε	
Approach Delay (s)		69.1			45.4			51.5			52.6	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			56.5	H	CM 2000	Level of	Service		Е			
HCM 2000 Volume to Capa	city ratio		1.18									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ation		92.1%	IC	CU Level of	of Service	9		F			
Analysis Period (min)			15									
c Critical Lane Group												

Movement		۶	-	←	•	<b>&gt;</b>	4			
Lane Configurations	Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Volume (vph)   99   1306   930   32   22   45     Ideal Flow (vphpl)   1620   1620   1620   1620   1620   1620     Total Lost time (s)										
Ideal Flow (vphpl)	•				32		45			
Total Lost time (s)										
Lane Util. Factor										
Fit Protected   0.95   1.00   1.00   0.98										
Satd. Flow (prot)         1509         3018         3003         1421           Flt Permitted         0.26         1.00         1.00         0.98           Satd. Flow (perm)         408         3018         3003         1421           Peak-hour factor, PHF         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         108         1420         1011         35         24         49           RTOR Reduction (vph)         0         0         2         0         43         0           Lane Group Flow (vph)         108         1420         1044         0         30         0           Turn Type         Perm         NA         NA         Prot         Protected Phases         2         6         4           Permitted Phases         2         6         4         4	Frt									
Sald. Flow (prot)         1509         3018         3003         1421           Flt Permitted         0.26         1.00         1.00         0.98           Sald. Flow (perm)         408         3018         3003         1421           Peak-hour factor, PHF         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         108         1420         1011         35         24         49           RTOR Reduction (vph)         0         0         2         0         43         0           Lane Group Flow (vph)         108         1420         1044         0         30         0           Turn Type         Perm         NA         NA         Protected Phases         2         6         4           Permitted Phases         2         6         4										
Fit Permitted   0.26   1.00   1.00   0.98     Satd. Flow (perm)   408   3018   3003   1421     Peak-hour factor, PHF   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92	Satd. Flow (prot)		3018	3003		1421				
Peak-hour factor, PHF   0.92   0.92   0.92   0.92   0.92   0.92   0.92     Adj. Flow (vph)   108   1420   1011   35   24   49     RTOR Reduction (vph)   0										
Peak-hour factor, PHF   0.92   0.92   0.92   0.92   0.92   0.92   0.92	Satd. Flow (perm)	408	3018	3003		1421				
Adj. Flow (vph)         108         1420         1011         35         24         49           RTOR Reduction (vph)         0         0         2         0         43         0           Lane Group Flow (vph)         108         1420         1044         0         30         0           Turn Type         Perm         NA         NA         Prot           Protected Phases         2         6         4           Perm that NA         NA         Prot           Protected Phases           2         6         4           Permitted Phases           2           Actuated Green, G (s)         81.5         81.5         12.0           Effective Green, g (s)         81.0         81.0         12.5           Actuated g/C Ratio         0.80         0.80         0.80         0.12           Clearance fire (s)         3.5         3.5         3.5         4.5           Vehicle Extension (s)         0.2         0.2         0.2         3.0           Lane Grp Cap (vph)         325         2408         2396         175					0.92		0.92			
RTOR Reduction (vph)         0         0         2         0         43         0           Lane Group Flow (vph)         108         1420         1044         0         30         0           Turn Type         Perm         NA         NA         Prot           Protected Phases         2         6         4           Permitted Phases         2         2           Actualed Green, G (s)         81.5         81.5         12.0           Effective Green, g (s)         81.0         81.0         12.5           Actuated g/C Ratio         0.80         0.80         0.80         0.12           Clearance Time (s)         3.5         3.5         3.5         4.5           Vehicle Extension (s)         0.2         0.2         3.0         175           Vehicle Extension (s)         0.2         0.2         3.0         175           Vs Ratio Prot         c0.47         0.35         c0.02         0.02           Vs Ratio Prot         c0.47         0.35         c0.02         0.02           Vs Ratio Perm         0.26         0.4         0.17         0.17           Uniform Delay, d1         2.8         3.9         3.2         39.9										
Lane Group Flow (vph)         108         1420         1044         0         30         0           Turn Type         Perm         NA         NA         Prot           Protected Phases         2         6         4           Permitted Phases         2         6         4           Permitted Phases         2         8         9           Actuated Green, G (s)         81.5         81.5         12.0           Effective Green, g (s)         81.0         81.0         12.5           Actuated g/C Ratio         0.80         0.80         0.12           Clearance Time (s)         3.5         3.5         3.5           Vehicle Extension (s)         0.2         0.2         0.2           Vehicle Extension (s)         0.2         0.2         0.2           Vehicle Extension (s)         0.2         0.2         0.2           Venicle Extension (s)         0.2         0.2         0.2           Value         0.0         0.0         0.0           Value         0.0         0.0         0.0           Value         0.2         0.2         0.0           Value         0.2         0.4         0.17										
Turn Type	· · ·									
Protected Phases 2 Permitted Phases 2 Actuated Green, G (s) 81.5 81.5 81.5 12.0 Effective Green, g (s) 81.0 81.0 81.0 12.5 Actuated g/C Ratio 0.80 0.80 0.80 0.12 Clearance Time (s) 3.5 3.5 3.5 4.5 Vehicle Extension (s) 0.2 0.2 0.2 3.0 Lane Grp Cap (vph) 325 2408 2396 175 V/s Ratio Prot c0.47 0.35 c0.02 V/s Ratio Perm 0.26 V/c Ratio 0.33 0.59 0.44 0.17 Uniform Delay, d1 2.8 3.9 3.2 39.9 Progression Factor 0.25 0.22 1.00 1.00 Incremental Delay, d2 2.2 0.9 0.6 0.5 Delay (s) 2.9 1.7 3.8 40.3 Level of Service A A A D Approach Delay (s) 1.8 3.8 40.3 Approach LOS A A D  Intersection Summary HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.53 Actuated Cycle Length (s) 10.15 Sum of lost time (s) 8.0 Intersection Capacity Utilization 65.5% ICU Level of Service C						Prot				
Permitted Phases   2										
Effective Green, g (s) 81.0 81.0 81.0 12.5  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 3.5 3.5 3.5 4.5  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 325 2408 2396 175  v/s Ratio Prot c0.47 0.35 c0.02  v/s Ratio Perm 0.26  v/c Ratio 0.33 0.59 0.44 0.17  Uniform Delay, d1 2.8 3.9 3.2 39.9  Progression Factor 0.25 0.22 1.00 1.00  Incremental Delay, d2 2.2 0.9 0.6 0.5  Delay (s) 2.9 1.7 3.8 40.3  Level of Service A A A A D  Approach Delay (s) 1.8 3.8 40.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.53  Actuated Cycle Length (s) 10.5 Sum of lost time (s) 8.0  Intersection Capacity Utilization 65.5% ICU Level of Service C		2								
Effective Green, g (s) 81.0 81.0 81.0 12.5  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 3.5 3.5 3.5 4.5  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 325 2408 2396 175  v/s Ratio Prot c0.47 0.35 c0.02  v/s Ratio Perm 0.26  v/c Ratio 0.33 0.59 0.44 0.17  Uniform Delay, d1 2.8 3.9 3.2 39.9  Progression Factor 0.25 0.22 1.00 1.00  Incremental Delay, d2 2.2 0.9 0.6 0.5  Delay (s) 2.9 1.7 3.8 40.3  Level of Service A A A A D  Approach Delay (s) 1.8 3.8 40.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.53  Actuated Cycle Length (s) 10.5 Sum of lost time (s) 8.0  Intersection Capacity Utilization 65.5% ICU Level of Service C	Actuated Green, G (s)	81.5	81.5	81.5		12.0				
Actuated g/C Ratio 0.80 0.80 0.80 0.12 Clearance Time (s) 3.5 3.5 3.5 4.5 Vehicle Extension (s) 0.2 0.2 0.2 3.0 Lane Grp Cap (vph) 325 2408 2396 175 v/s Ratio Prot c0.47 0.35 c0.02 v/s Ratio Perm 0.26 v/c Ratio 0.33 0.59 0.44 0.17 Uniform Delay, d1 2.8 3.9 3.2 39.9 Progression Factor 0.25 0.22 1.00 1.00 Incremental Delay, d2 2.2 0.9 0.6 0.5 Delay (s) 2.9 1.7 3.8 40.3 Level of Service A A A A D Approach Delay (s) 1.8 3.8 40.3 Approach LOS A A D  Intersection Summary HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.53 Actuated Cycle Length (s) 10.5 Sum of lost time (s) 8.0 Intersection Capacity Utilization 65.5% ICU Level of Service C		81.0	81.0	81.0		12.5				
Clearance Time (s)       3.5       3.5       3.5       4.5         Vehicle Extension (s)       0.2       0.2       0.2       3.0         Lane Grp Cap (vph)       325       2408       2396       175         v/s Ratio Prot       c0.47       0.35       c0.02         v/s Ratio Perm       0.26       0.26       0.24       0.17         Uniform Delay, d1       2.8       3.9       3.2       39.9         Progression Factor       0.25       0.22       1.00       1.00         Incremental Delay, d2       2.2       0.9       0.6       0.5         Delay (s)       2.9       1.7       3.8       40.3         Level of Service       A       A       A       D         Approach Delay (s)       1.8       3.8       40.3         Approach LOS       A       A       D         Intersection Summary       4.0       A       B       A         HCM 2000 Control Delay       3.6       HCM 2000 Level of Service       A         Actuated Cycle Length (s)       101.5       Sum of lost time (s)       8.0         Intersection Capacity Utilization       65.5%       ICU Level of Service       C		0.80	0.80	0.80		0.12				
Lane Grp Cap (vph)       325       2408       2396       175         V/s Ratio Prot       c0.47       0.35       c0.02         V/s Ratio Perm       0.26         V/c Ratio       0.33       0.59       0.44       0.17         Uniform Delay, d1       2.8       3.9       3.2       39.9         Progression Factor       0.25       0.22       1.00       1.00         Incremental Delay, d2       2.2       0.9       0.6       0.5         Delay (s)       2.9       1.7       3.8       40.3         Level of Service       A       A       A       D         Approach Delay (s)       1.8       3.8       40.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       3.6       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.53         Actuated Cycle Length (s)       101.5       Sum of lost time (s)       8.0         Intersection Capacity Utilization       65.5%       ICU Level of Service       C		3.5	3.5	3.5		4.5				
V/s Ratio Prot       c0.47       0.35       c0.02         V/s Ratio Perm       0.26       0.26         V/c Ratio       0.33       0.59       0.44       0.17         Uniform Delay, d1       2.8       3.9       3.2       39.9         Progression Factor       0.25       0.22       1.00       1.00         Incremental Delay, d2       2.2       0.9       0.6       0.5         Delay (s)       2.9       1.7       3.8       40.3         Level of Service       A       A       A       D         Approach Delay (s)       1.8       3.8       40.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       3.6       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.53         Actuated Cycle Length (s)       101.5       Sum of lost time (s)       8.0         Intersection Capacity Utilization       65.5%       ICU Level of Service       C	Vehicle Extension (s)	0.2	0.2	0.2		3.0				
V/s Ratio Perm       0.26         V/c Ratio       0.33       0.59       0.44       0.17         Uniform Delay, d1       2.8       3.9       3.2       39.9         Progression Factor       0.25       0.22       1.00       1.00         Incremental Delay, d2       2.2       0.9       0.6       0.5         Delay (s)       2.9       1.7       3.8       40.3         Level of Service       A       A       A       D         Approach Delay (s)       1.8       3.8       40.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       3.6       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.53         Actuated Cycle Length (s)       101.5       Sum of lost time (s)       8.0         Intersection Capacity Utilization       65.5%       ICU Level of Service       C	Lane Grp Cap (vph)	325	2408	2396		175				
V/c Ratio       0.33       0.59       0.44       0.17         Uniform Delay, d1       2.8       3.9       3.2       39.9         Progression Factor       0.25       0.22       1.00       1.00         Incremental Delay, d2       2.2       0.9       0.6       0.5         Delay (s)       2.9       1.7       3.8       40.3         Level of Service       A       A       A       D         Approach Delay (s)       1.8       3.8       40.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       3.6       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.53         Actuated Cycle Length (s)       101.5       Sum of lost time (s)       8.0         Intersection Capacity Utilization       65.5%       ICU Level of Service       C	v/s Ratio Prot		c0.47	0.35		c0.02				
Uniform Delay, d1         2.8         3.9         3.2         39.9           Progression Factor         0.25         0.22         1.00         1.00           Incremental Delay, d2         2.2         0.9         0.6         0.5           Delay (s)         2.9         1.7         3.8         40.3           Level of Service         A         A         A         D           Approach Delay (s)         1.8         3.8         40.3           Approach LOS         A         A         D           Intersection Summary         B         HCM 2000 Level of Service         A           HCM 2000 Volume to Capacity ratio         0.53         C           Actuated Cycle Length (s)         101.5         Sum of lost time (s)         8.0           Intersection Capacity Utilization         65.5%         ICU Level of Service         C	v/s Ratio Perm	0.26								
Progression Factor         0.25         0.22         1.00         1.00           Incremental Delay, d2         2.2         0.9         0.6         0.5           Delay (s)         2.9         1.7         3.8         40.3           Level of Service         A         A         A         D           Approach Delay (s)         1.8         3.8         40.3           Approach LOS         A         A         D    Intersection Summary  HCM 2000 Control Delay  Actuated Cycle Length (s)  Intersection Capacity ratio  O.53  Actuated Cycle Length (s)  Intersection Capacity Utilization  O.55%  ICU Level of Service  C         A	v/c Ratio	0.33	0.59	0.44		0.17				
Incremental Delay, d2	Uniform Delay, d1	2.8	3.9	3.2		39.9				
Delay (s)         2.9         1.7         3.8         40.3           Level of Service         A         A         A         D           Approach Delay (s)         1.8         3.8         40.3           Approach LOS         A         A         D           Intersection Summary           HCM 2000 Control Delay         3.6         HCM 2000 Level of Service         A           HCM 2000 Volume to Capacity ratio         0.53         Actuated Cycle Length (s)         101.5         Sum of lost time (s)         8.0           Intersection Capacity Utilization         65.5%         ICU Level of Service         C	Progression Factor	0.25	0.22	1.00		1.00				
Level of Service A A A A D  Approach Delay (s) 1.8 3.8 40.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.53  Actuated Cycle Length (s) 101.5 Sum of lost time (s) 8.0  Intersection Capacity Utilization 65.5% ICU Level of Service C	Incremental Delay, d2	2.2	0.9	0.6		0.5				
Approach Delay (s)  Approach LOS  A  A  A  D  Intersection Summary  HCM 2000 Control Delay  HCM 2000 Volume to Capacity ratio  Actuated Cycle Length (s)  Intersection Capacity Utilization  1.8  3.8  40.3  A D  D  Intersection Summary  HCM 2000 Level of Service  A  Sum of lost time (s)  8.0  ICU Level of Service  C		2.9	1.7			40.3				
Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 3.6 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.53  Actuated Cycle Length (s) 101.5 Sum of lost time (s) 8.0  Intersection Capacity Utilization 65.5% ICU Level of Service C	Level of Service	Α								
Intersection Summary  HCM 2000 Control Delay  3.6 HCM 2000 Level of Service  A  HCM 2000 Volume to Capacity ratio  0.53  Actuated Cycle Length (s)  101.5 Sum of lost time (s)	Approach Delay (s)		1.8	3.8		40.3				
HCM 2000 Control Delay  3.6 HCM 2000 Level of Service  A  HCM 2000 Volume to Capacity ratio  0.53  Actuated Cycle Length (s)  101.5 Sum of lost time (s)	Approach LOS		Α	Α		D				
HCM 2000 Volume to Capacity ratio0.53Actuated Cycle Length (s)101.5Sum of lost time (s)8.0Intersection Capacity Utilization65.5%ICU Level of ServiceC	Intersection Summary									
Actuated Cycle Length (s) 101.5 Sum of lost time (s) 8.0 Intersection Capacity Utilization 65.5% ICU Level of Service C	HCM 2000 Control Delay				H	CM 2000	Level of Service	)	Α	
Intersection Capacity Utilization 65.5% ICU Level of Service C		ity ratio		0.53						
$\mathbf{I}$	Actuated Cycle Length (s)			101.5	Sı	um of lost	time (s)			
Analysis Period (min) 15		ion			IC	U Level o	of Service		С	
	Analysis Period (min)			15						
c Critical Lane Group	c Critical Lane Group									

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β			<b>€1</b> }						4	
Volume (vph)	73	1292	4	8	929	89	0	0	0	38	5	56
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			0.99						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3016			2977						1438	
Flt Permitted	0.24	1.00			0.94						0.98	
Satd. Flow (perm)	379	3016			2811						1438	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	79	1404	4	8	1010	97	0	0	0	41	5	61
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	53	0
Lane Group Flow (vph)	79	1408	0	0	1110	0	0	0	0	0	54	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	80.6	80.6			80.6						10.9	
Effective Green, g (s)	80.6	80.6			80.6						10.9	
Actuated g/C Ratio	0.81	0.81			0.81						0.11	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	305	2430			2265						156	
v/s Ratio Prot		c0.47									c0.04	
v/s Ratio Perm	0.21				0.40							
v/c Ratio	0.26	0.58			0.49						0.34	
Uniform Delay, d1	2.4	3.5			3.1						41.2	
Progression Factor	0.26	0.21			0.82						1.00	
Incremental Delay, d2	1.7	8.0			0.7						1.3	
Delay (s)	2.3	1.6			3.2						42.6	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.6			3.2			0.0			42.6	
Approach LOS		Α			А			Α			D	
Intersection Summary												
HCM 2000 Control Delay			3.9	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.55									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizat	ion		85.0%	IC	CU Level of	of Service			Ε			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> }		ň	<b>∱</b> }		ň	ĵ»		ሻ	ĵ»	
Volume (vph)	4	1344	43	52	946	1	39	236	48	10	184	54
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	3004		1509	3017		1509	1548		1509	1534	
Flt Permitted	0.25	1.00		0.13	1.00		0.39	1.00		0.30	1.00	
Satd. Flow (perm)	397	3004		206	3017		614	1548		476	1534	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	4	1415	45	55	996	1	41	248	51	11	194	57
RTOR Reduction (vph)	0	2	0	0	0	0	0	8	0	0	11	0
Lane Group Flow (vph)	4	1458	0	55	997	0	41	291	0	11	240	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.6	68.6		68.6	68.6		23.4	23.4		23.4	23.4	
Effective Green, g (s)	68.6	68.6		68.6	68.6		23.4	23.4		23.4	23.4	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	272	2060		141	2069		143	362		111	358	
v/s Ratio Prot		c0.49			0.33			c0.19			0.16	
v/s Ratio Perm	0.01			0.27			0.07			0.02		
v/c Ratio	0.01	0.71		0.39	0.48		0.29	0.80		0.10	0.67	
Uniform Delay, d1	5.0	9.6		6.7	7.4		31.4	36.1		30.0	34.8	
Progression Factor	0.58	0.67		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.7		7.9	8.0		1.1	12.1		0.4	4.7	
Delay (s)	3.0	8.2		14.7	8.2		32.6	48.2		30.4	39.5	
Level of Service	Α	Α		В	Α		С	D		С	D	
Approach Delay (s)		8.2			8.5			46.3			39.1	
Approach LOS		Α			Α			D			D	
Intersection Summary												
HCM 2000 Control Delay			15.0	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.73									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		82.0%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		*	<b>↑</b> ↑		¥	<b>∱</b> }	
Volume (vph)	41	285	32	58	106	58	31	918	195	68	832	30
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.96		1.00	0.97		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1560			1513		1509	2938		1509	3002	
Flt Permitted		0.95			0.85		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1485			1310		397	2938		397	3002	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	300	34	61	112	61	33	966	205	72	876	32
RTOR Reduction (vph)	0	9	0	0	25	0	0	45	0	0	7	0
Lane Group Flow (vph)	0	368	0	0	209	0	33	1126	0	72	901	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	·
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		594			524		158	1175		158	1200	
v/s Ratio Prot								c0.38			0.30	
v/s Ratio Perm		c0.25			0.16		0.08			0.18		
v/c Ratio		0.62			0.40		0.21	0.96		0.46	0.75	
Uniform Delay, d1		9.6			8.6		7.9	11.7		8.8	10.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.8			2.3		3.0	18.0		9.2	4.4	
Delay (s)		14.4			10.8		10.8	29.7		18.0	14.7	
Level of Service		В			В		В	С		В	В	
Approach Delay (s)		14.4			10.8			29.1			14.9	
Approach LOS		В			В			С			В	
Intersection Summary												
HCM 2000 Control Delay			20.6	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capacity	/ ratio		0.79									
Actuated Cycle Length (s)			40.0	S	um of lost	time (s)			8.0			
Intersection Capacity Utilization	n		78.8%	IC	CU Level	of Service			D			
Analysis Period (min)			15									

c Critical Lane Group

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	<b>∱</b> ⊅		W		
Volume (vph)	52	1223	1012	43	36	29	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	0.99		0.94		
Flt Protected		1.00	1.00		0.97		
Satd. Flow (prot)		3011	2999		1452		
Flt Permitted		0.84	1.00		0.97		
Satd. Flow (perm)		2531	2999		1452		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	57	1329	1100	47	39	32	
RTOR Reduction (vph)	0	0	3	0	28	0	
Lane Group Flow (vph)	0	1386	1144	0	43	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		67.1	67.1		12.3		
Effective Green, g (s)		69.7	69.7		12.3		
Actuated g/C Ratio		0.77	0.77		0.14		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		1960	2322		198		
v/s Ratio Prot			0.38		c0.03		
v/s Ratio Perm		c0.55					
v/c Ratio		0.71	0.49		0.22		
Uniform Delay, d1		5.1	3.7		34.6		
Progression Factor		1.00	0.38		1.00		
Incremental Delay, d2		2.2	0.7		0.6		
Delay (s)		7.2	2.1		35.1		
Level of Service		Α	Α		D		
Approach Delay (s)		7.2	2.1		35.1		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			5.7	Н	CM 2000	Level of Service	
HCM 2000 Volume to Capaci	ty ratio		0.63				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utilization	on		94.2%	IC	U Level o	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }	20.1	*	<b>^</b>	W			
Volume (vph)	1348	22	35	943	44	72		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3010		1509	3018	1428			
Flt Permitted	1.00		0.15	1.00	0.98			
Satd. Flow (perm)	3010		238	3018	1428			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1465	24	38	1025	48	78		
RTOR Reduction (vph)	1	0	0	0	59	0		
Lane Group Flow (vph)	1488	0	38	1025	67	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	4			
Permitted Phases	_		6		•			
Actuated Green, G (s)	81.5		81.5	81.5	12.0			
Effective Green, g (s)	81.0		81.0	81.0	12.5			
Actuated g/C Ratio	0.80		0.80	0.80	0.12			
Clearance Time (s)	3.5		3.5	3.5	4.5			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2402		189	2408	175			
v/s Ratio Prot	c0.49			0.34	c0.05			
v/s Ratio Perm			0.16					
v/c Ratio	0.62		0.20	0.43	0.38			
Uniform Delay, d1	4.1		2.5	3.1	41.0			
Progression Factor	1.00		0.28	0.26	1.00			
Incremental Delay, d2	1.2		2.2	0.5	1.4			
Delay (s)	5.3		2.9	1.3	42.4			
Level of Service	А		Α	A	D			
Approach Delay (s)	5.3			1.4	42.4			
Approach LOS	А			Α	D			
Intersection Summary								
HCM 2000 Control Delay			5.5	Н	CM 2000	Level of Service	А	
HCM 2000 Volume to Capa	acity ratio		0.59					
Actuated Cycle Length (s)	,		101.5	S	um of lost	time (s)	8.0	
Intersection Capacity Utiliza	ation		59.2%		CU Level o		В	
Analysis Period (min)			15					
c Critical Lane Group								

	-	•	•	•	<b>~</b>	<i>&gt;</i>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> Ъ	20.1	ሻ	<b>^</b>	W			
Volume (vph)	1301	26	49	949	59	56		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.93			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3009		1509	3018	1447			
Flt Permitted	1.00		0.16	1.00	0.98			
Satd. Flow (perm)	3009		255	3018	1447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1414	28	53	1032	64	61		
RTOR Reduction (vph)	1	0	0	0	38	0		
Lane Group Flow (vph)	1441	0	53	1032	87	0		
Turn Type	NA		Perm	NA	Prot	-		
Protected Phases	2		1 01111	6	8			
Permitted Phases	_		6	· ·	· ·			
Actuated Green, G (s)	80.6		80.6	80.6	11.4			
Effective Green, g (s)	80.6		80.6	80.6	11.4			
Actuated g/C Ratio	0.81		0.81	0.81	0.11			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2425		205	2432	164			
v/s Ratio Prot	c0.48			0.34	c0.06			
v/s Ratio Perm			0.21					
v/c Ratio	0.59		0.26	0.42	0.53			
Uniform Delay, d1	3.6		2.4	2.9	41.8			
Progression Factor	1.00		0.27	0.27	1.00			
Incremental Delay, d2	1.1		2.7	0.5	3.1			
Delay (s)	4.7		3.4	1.2	44.8			
Level of Service	А		Α	А	D			
Approach Delay (s)	4.7			1.4	44.8			
Approach LOS	А			Α	D			
Intersection Summary								
HCM 2000 Control Delay			5.2	Н	CM 2000	Level of Service	 А	
HCM 2000 Volume to Capa	acity ratio		0.59					
Actuated Cycle Length (s)	_		100.0	S	um of lost	time (s)	8.5	
Intersection Capacity Utiliza	ation		62.3%		CU Level o		В	
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	<b>←</b>	•	<b>&gt;</b>	4
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41∱	<b>↑</b> ↑		W	
Volume (veh/h)	16	1354	956	40	4	25
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	1472	1039	43	4	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1083				1832	541
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1083				1832	541
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				93	94
cM capacity (veh/h)	640				66	485
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	508	981	693	390	32	
Volume Left	17	0	0	0	4	
Volume Right	0	0	0	43	27	
cSH	640	1700	1700	1700	258	
Volume to Capacity	0.03	0.58	0.41	0.23	0.12	
Queue Length 95th (ft)	2	0.00	0.11	0.20	10	
Control Delay (s)	0.8	0.0	0.0	0.0	20.9	
Lane LOS	A	0.0	0.0	0.0	C	
Approach Delay (s)	0.3		0.0		20.9	
Approach LOS					С	
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utili:	zation		67.1%	IC	:U Level d	of Service
Analysis Period (min)			15	10	5 257010	001 1100
raidiyələ i Cilou (ililli)			13			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β		Ť	<b>∱</b> β		7	<b>∱</b> β		ň	<b>∱</b> ∱	
Volume (vph)	108	593	123	241	1080	59	106	631	42	58	768	346
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2940		1509	2994		1509	2990		1509	2877	
Flt Permitted	0.15	1.00		0.31	1.00		0.11	1.00		0.25	1.00	
Satd. Flow (perm)	242	2940		494	2994		176	2990		393	2877	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	114	624	129	254	1137	62	112	664	44	61	808	364
RTOR Reduction (vph)	0	18	0	0	4	0	0	5	0	0	47	0
Lane Group Flow (vph)	114	735	0	254	1195	0	112	703	0	61	1125	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	135	1646		276	1676		63	1076		141	1035	
v/s Ratio Prot		0.25			0.40			0.24			0.39	
v/s Ratio Perm	0.47			c0.51			c0.63			0.16		
v/c Ratio	0.84	0.45		0.92	0.71		1.78	0.65		0.43	1.09	
Uniform Delay, d1	18.4	12.9		20.0	16.1		32.0	26.8		24.3	32.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Incremental Delay, d2	44.3	0.9		37.0	2.6		405.5	3.0		9.4	54.8	
Delay (s)	62.7	13.8		57.0	18.7		437.5	29.4		33.6	86.8	
Level of Service	E	В		E	В		F	С		С	F	
Approach Delay (s)		20.2			25.4			85.2			84.2	
Approach LOS		С			С			F			F	
Intersection Summary												
HCM 2000 Control Delay			52.2	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	ity ratio		1.25									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		105.1%	IC	CU Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

	-	•	•	←	4	<b>/</b>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b>	LDIX	WDL	414	¥	TOTAL		
Volume (vph)	781	19	28	1308	28	13		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	.020	4.0	4.0	. 020		
Lane Util. Factor	0.95			0.95	1.00			
Frt	1.00			1.00	0.96			
Flt Protected	1.00			1.00	0.97			
Satd. Flow (prot)	3007			3015	1469			
Flt Permitted	1.00			0.92	0.97			
Satd. Flow (perm)	3007			2787	1469			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	822	20	29	1377	29	14		
RTOR Reduction (vph)	1	0	0	0	13	0		
Lane Group Flow (vph)	841	0	0	1406	30	0		
Turn Type	NA	- 0	Perm	NA	Prot			
Protected Phases	2		I CIIII	2	4			
Permitted Phases	Z		2	2	7			
Actuated Green, G (s)	70.2			70.2	9.2			
Effective Green, g (s)	72.8			72.8	9.2			
Actuated g/C Ratio	0.81			0.81	0.10			
Clearance Time (s)	6.6			6.6	4.0			
Vehicle Extension (s)	5.0			5.0	3.0			
Lane Grp Cap (vph)	2432			2254	150			
v/s Ratio Prot	0.28			2234	c0.02			
v/s Ratio Perm	0.20			c0.50	00.02			
v/c Ratio	0.35			0.62	0.20			
Uniform Delay, d1	2.3			3.3	37.0			
Progression Factor	0.24			1.00	1.00			
Incremental Delay, d2	0.4			1.3	0.7			
Delay (s)	0.9			4.6	37.7			
Level of Service	Α			Α.	D			
Approach Delay (s)	0.9			4.6	37.7			
Approach LOS	A			A	D			
• •	, ,			, ,				
Intersection Summary			2.0	1.1.	ON 4 2000	Laval of Carri	Δ	
HCM 2000 Control Delay			3.9	H(	UNI 2000	Level of Service	Α	
HCM 2000 Volume to Cap			0.58			ting = (=)	0.0	
Actuated Cycle Length (s)			90.0		um of lost		8.0	
Intersection Capacity Utiliz	zalion		80.9%	IC	U Level o	Service	D	
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	•	<b>†</b>	/	<b>&gt;</b>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	<b>∱</b> ∱		Ť	ħβ			र्स	7		4	
Volume (vph)	30	726	35	87	1123	22	29	130	56	52	210	75
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	2997		1509	3009			1574	1350		1529	
Flt Permitted	0.19	1.00		0.32	1.00			0.83	1.00		0.92	
Satd. Flow (perm)	295	2997		507	3009			1312	1350		1423	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	764	37	92	1182	23	31	137	59	55	221	79
RTOR Reduction (vph)	0	4	0	0	2	0	0	0	45	0	11	0
Lane Group Flow (vph)	32	797	0	92	1203	0	0	168	14	0	344	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	196	1998		338	2006			320	330		347	
v/s Ratio Prot		0.27			c0.40							
v/s Ratio Perm	0.11			0.18				0.13	0.01		c0.24	
v/c Ratio	0.16	0.40		0.27	0.60			0.53	0.04		0.99	
Uniform Delay, d1	5.6	6.8		6.1	8.3			29.5	26.0		33.9	
Progression Factor	1.00	1.00		0.44	0.45			1.00	1.00		1.00	
Incremental Delay, d2	1.8	0.6		1.4	0.9			1.6	0.1		45.6	
Delay (s)	7.4	7.4		4.1	4.7			31.0	26.0		79.5	
Level of Service	Α	Α		Α	Α			С	С		Ε	
Approach Delay (s)		7.4			4.6			29.7			79.5	
Approach LOS		Α			Α			С			Е	
Intersection Summary												
HCM 2000 Control Delay			17.4	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.70									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		90.5%	IC	CU Level o	of Service	1		Е			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	•	1	<b>†</b>	<b>/</b>	<b>/</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ሻ	<b>∱</b> }		*	<b>^</b>	7	ሻ	<b>∱</b> }	
Volume (vph)	141	670	71	329	996	75	117	610	92	92	709	64
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2974		1509	2986		1509	3018	1350	1509	2980	
Flt Permitted	0.13	1.00		0.26	1.00		0.15	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	205	2974		416	2986		245	3018	1350	349	2980	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	705	75	346	1048	79	123	642	97	97	746	67
RTOR Reduction (vph)	0	8	0	0	5	0	0	0	60	0	7	0
Lane Group Flow (vph)	148	772	0	346	1122	0	123	642	37	97	806	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	53.1	46.3		53.5	46.5		33.9	26.9	26.9	30.8	25.6	
Effective Green, g (s)	51.1	46.3		51.5	46.5		31.9	27.0	27.0	29.8	25.7	
Actuated g/C Ratio	0.51	0.46		0.52	0.46		0.32	0.27	0.27	0.30	0.26	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	180	1376		279	1388		153	814	364	158	765	
v/s Ratio Prot	0.05	0.26		c0.07	0.38		c0.05	0.21		0.03	c0.27	
v/s Ratio Perm	0.37			c0.56			0.21		0.03	0.15		
v/c Ratio	0.82	0.56		1.24	0.81		0.80	0.79	0.10	0.61	1.05	
Uniform Delay, d1	17.1	19.5		22.9	22.9		27.7	33.9	27.4	27.4	37.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.59	0.67	
Incremental Delay, d2	24.0	1.7		134.8	5.2		34.6	7.6	0.6	4.4	46.1	
Delay (s)	41.2	21.1		157.7	28.1		62.3	41.5	28.0	20.6	71.1	
Level of Service	D	С		F	С		E	D	С	С	Ε	
Approach Delay (s)		24.3			58.5			42.9			65.7	
Approach LOS		С			E			D			E	
Intersection Summary												
HCM 2000 Control Delay			49.3	Н	CM 2000	Level of	Service		D			
HCM 2000 Volume to Capa	city ratio		1.14									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ition		92.1%	IC	CU Level of	of Service	9		F			
Analysis Period (min)			15									
c Critical Lane Group												

Movement         EBL         EBT         WBT         WBR         SBL         SBR           Lane Configurations         1
Lane Configurations         1         1         1           Volume (vph)         16         892         1297         22         25         103           Ideal Flow (vphpl)         1620         1620         1620         1620         1620           Total Lost time (s)         4.0         4.0         4.0           Lane Util. Factor         1.00         0.95         0.95         1.00           Frt         1.00         1.00         0.89           Flt Protected         0.95         1.00         1.00         0.99
Volume (vph)       16       892       1297       22       25       103         Ideal Flow (vphpl)       1620       1620       1620       1620       1620         Total Lost time (s)       4.0       4.0       4.0       4.0         Lane Util. Factor       1.00       0.95       0.95       1.00         Frt       1.00       1.00       0.89         Flt Protected       0.95       1.00       1.00       0.99
Ideal Flow (vphpl)     1620     1620     1620     1620     1620       Total Lost time (s)     4.0     4.0     4.0       Lane Util. Factor     1.00     0.95     0.95     1.00       Frt     1.00     1.00     1.00     0.89       Flt Protected     0.95     1.00     1.00     0.99
Total Lost time (s)       4.0       4.0       4.0         Lane Util. Factor       1.00       0.95       0.95       1.00         Frt       1.00       1.00       0.89         Flt Protected       0.95       1.00       1.00       0.99
Lane Util. Factor       1.00       0.95       0.95       1.00         Frt       1.00       1.00       1.00       0.89         Flt Protected       0.95       1.00       1.00       0.99
Flt Protected 0.95 1.00 1.00 0.99
Flt Protected 0.95 1.00 1.00 0.99
Flt Permitted 0.16 1.00 1.00 0.99
Satd. Flow (perm) 254 3018 3010 1402
Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92
Adj. Flow (vph) 17 970 1410 24 27 112
RTOR Reduction (vph) 0 0 1 0 65 0
Lane Group Flow (vph) 17 970 1433 0 74 0
Turn Type Perm NA NA Prot
Protected Phases 2 6 4
Permitted Phases 2
Actuated Green, G (s) 81.2 81.2 12.3
Effective Green, g (s) 80.7 80.7 12.8
Actuated g/C Ratio 0.80 0.80 0.80 0.13
Clearance Time (s) 3.5 3.5 4.5
Vehicle Extension (s) 0.2 0.2 0.2 3.0
Lane Grp Cap (vph) 201 2399 2393 176
v/s Ratio Prot 0.32 c0.48 c0.05
v/s Ratio Perm 0.07
v/c Ratio 0.08 0.40 0.60 0.42
Uniform Delay, d1 2.3 3.1 4.1 40.9
Progression Factor 0.31 0.25 1.00 1.00
Incremental Delay, d2 0.8 0.5 1.1 1.6
Delay (s) 1.5 1.3 5.2 42.6
Level of Service A A A D
Approach Delay (s) 1.3 5.2 42.6
Approach LOS A A D
Intersection Summary
HCM 2000 Control Delay 5.7 HCM 2000 Level of Service A
HCM 2000 Volume to Capacity ratio 0.57
Actuated Cycle Length (s) 101.5 Sum of lost time (s) 8.0
Intersection Capacity Utilization 58.6% ICU Level of Service B
Analysis Period (min) 15
c Critical Lane Group

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>/</b>	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> ∱			413-						4	
Volume (vph)	30	837	22	4	1319	24	0	0	0	52	8	70
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			1.00						0.93	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3006			3009						1443	
Flt Permitted	0.15	1.00			0.95						0.98	
Satd. Flow (perm)	246	3006			2869						1443	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	33	910	23	4	1434	26	0	0	0	57	8	76
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	0	0	47	0
Lane Group Flow (vph)	33	932	0	0	1463	0	0	0	0	0	94	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	79.8	79.8			79.8						11.7	
Effective Green, g (s)	79.8	79.8			79.8						11.7	
Actuated g/C Ratio	0.80	0.80			0.80						0.12	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	196	2398			2289						168	
v/s Ratio Prot		0.31									c0.07	
v/s Ratio Perm	0.13				c0.51							
v/c Ratio	0.17	0.39			0.64						0.56	
Uniform Delay, d1	2.4	3.0			4.2						41.7	
Progression Factor	0.25	0.23			0.54						1.00	
Incremental Delay, d2	1.7	0.4			1.1						4.2	
Delay (s)	2.3	1.1			3.4						46.0	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.2			3.4			0.0			46.0	
Approach LOS		Α			A			Α			D	
Intersection Summary												
HCM 2000 Control Delay			4.9	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.63									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizat	ion		62.9%	IC	CU Level	of Service			В			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ř	<b>∱</b> }		ሻ	f)		ሻ	ĵ»	
Volume (vph)	62	861	42	40	1229	54	31	88	26	73	166	78
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2997		1509	2999		1509	1535		1509	1512	
Flt Permitted	0.16	1.00		0.27	1.00		0.34	1.00		0.63	1.00	
Satd. Flow (perm)	253	2997		430	2999		535	1535		995	1512	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	906	44	42	1294	57	33	93	27	77	175	82
RTOR Reduction (vph)	0	3	0	0	2	0	0	12	0	0	19	0
Lane Group Flow (vph)	65	947	0	42	1349	0	33	108	0	77	238	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	71.1	71.1		71.1	71.1		20.9	20.9		20.9	20.9	
Effective Green, g (s)	71.1	71.1		71.1	71.1		20.9	20.9		20.9	20.9	
Actuated g/C Ratio	0.71	0.71		0.71	0.71		0.21	0.21		0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	179	2130		305	2132		111	320		207	316	
v/s Ratio Prot		0.32			c0.45			0.07			c0.16	
v/s Ratio Perm	0.26			0.10			0.06			0.08		
v/c Ratio	0.36	0.44		0.14	0.63		0.30	0.34		0.37	0.75	
Uniform Delay, d1	5.6	6.1		4.6	7.6		33.4	33.7		33.9	37.1	
Progression Factor	0.64	0.66		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.3	0.6		0.9	1.4		1.5	0.6		1.1	9.7	
Delay (s)	8.9	4.7		5.6	9.0		34.9	34.3		35.0	46.9	
Level of Service	Α	Α		Α	Α		С	С		D	D	
Approach Delay (s)		5.0			8.9			34.4			44.2	
Approach LOS		Α			Α			С			D	
Intersection Summary												
HCM 2000 Control Delay			13.0	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.66									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		89.6%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		J.	ħβ		,	<b>∱</b> ∱	
Volume (vph)	50	60	31	150	259	40	67	733	23	31	1098	43
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.97			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1514			1543		1509	3004		1509	3001	
Flt Permitted		0.82			0.84		0.24	1.00		0.28	1.00	
Satd. Flow (perm)		1263			1313		387	3004		450	3001	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	63	33	158	273	42	71	772	24	33	1156	45
RTOR Reduction (vph)	0	13	0	0	9	0	0	5	0	0	6	0
Lane Group Flow (vph)	0	136	0	0	464	0	71	791	0	33	1195	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.6			15.6		16.4	16.4		16.4	16.4	
Effective Green, g (s)		15.6			15.6		16.4	16.4		16.4	16.4	
Actuated g/C Ratio		0.39			0.39		0.41	0.41		0.41	0.41	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		492			512		158	1231		184	1230	
v/s Ratio Prot								0.26			c0.40	
v/s Ratio Perm		0.11			c0.35		0.18			0.07		
v/c Ratio		0.28			0.91		0.45	0.64		0.18	0.97	
Uniform Delay, d1		8.3			11.5		8.5	9.5		7.5	11.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			19.5		9.0	2.6		2.1	19.6	
Delay (s)		8.7			31.0		17.5	12.0		9.6	31.2	
Level of Service		Α			С		В	В		Α	С	
Approach Delay (s)		8.7			31.0			12.5			30.6	
Approach LOS		Α			С			В			С	
Intersection Summary												
HCM 2000 Control Delay			23.7	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capaci	ty ratio		0.94									
Actuated Cycle Length (s)			40.0		um of lost				8.0			
Intersection Capacity Utilization	on		86.8%	IC	CU Level	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		414	ħβ		¥#			
Volume (vph)	14	769	1306	11	25	56		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)		4.0	4.0		4.0			
Lane Util. Factor		0.95	0.95		1.00			
Frt		1.00	1.00		0.91			
Flt Protected		1.00	1.00		0.98			
Satd. Flow (prot)		3015	3014		1418			
Flt Permitted		0.92	1.00		0.98			
Satd. Flow (perm)		2766	3014		1418			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	15	836	1420	12	27	61		
RTOR Reduction (vph)	0	0	0	0	55	0		
Lane Group Flow (vph)	0	851	1432	0	33	0		
	Perm	NA	NA		Prot			
Protected Phases		2	2		4			
Permitted Phases	2							
Actuated Green, G (s)		70.2	70.2		9.2			
Effective Green, g (s)		72.8	72.8		9.2			
Actuated g/C Ratio		0.81	0.81		0.10			
Clearance Time (s)		6.6	6.6		4.0			
Vehicle Extension (s)		5.0	5.0		3.0			
Lane Grp Cap (vph)		2237	2437		144			
v/s Ratio Prot			c0.48		c0.02			
v/s Ratio Perm		0.31						
v/c Ratio		0.38	0.59		0.23			
Uniform Delay, d1		2.4	3.1		37.1			
Progression Factor		1.00	0.18		1.00			
Incremental Delay, d2		0.5	0.8		0.8			
Delay (s)		2.9	1.4		38.0			
Level of Service		Α	Α		D			
Approach Delay (s)		2.9	1.4		38.0			
Approach LOS		Α	Α		D			
Intersection Summary								
HCM 2000 Control Delay			3.3	H(	CM 2000	Level of Service	 А	 
HCM 2000 Volume to Capacity	ratio		0.55					
Actuated Cycle Length (s)			90.0	Sı	um of lost	time (s)	8.0	
Intersection Capacity Utilization	1		57.8%			of Service	В	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	<b>↑</b> ↑	2011	ሻ	<b>^</b>	W	71211			
Volume (vph)	878	9	62	1305	23	35			
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620			
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020			
Lane Util. Factor	0.95		1.00	0.95	1.00				
Frt	1.00		1.00	1.00	0.92				
Flt Protected	1.00		0.95	1.00	0.98				
Satd. Flow (prot)	3013		1509	3018	1431				
Flt Permitted	1.00		0.28	1.00	0.98				
Satd. Flow (perm)	3013		447	3018	1431				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	954	10	67	1418	25	38			
RTOR Reduction (vph)	0	0	0	0	33	0			
Lane Group Flow (vph)	964	0	67	1418	30	0			
Turn Type	NA		Perm	NA	Prot				
Protected Phases	2			6	4				
Permitted Phases			6		•				
Actuated Green, G (s)	81.2		81.2	81.2	12.3				
Effective Green, g (s)	80.7		80.7	80.7	12.8				
Actuated g/C Ratio	0.80		0.80	0.80	0.13				
Clearance Time (s)	3.5		3.5	3.5	4.5				
Vehicle Extension (s)	0.2		0.2	0.2	3.0				
Lane Grp Cap (vph)	2395		355	2399	180				
v/s Ratio Prot	0.32			c0.47	c0.02				
v/s Ratio Perm			0.15						
v/c Ratio	0.40		0.19	0.59	0.17				
Uniform Delay, d1	3.1		2.5	4.0	39.6				
Progression Factor	1.00		0.36	0.27	1.00				
Incremental Delay, d2	0.5		1.0	0.9	0.4				
Delay (s)	3.6		1.9	2.0	40.0				
Level of Service	А		Α	Α	D				
Approach Delay (s)	3.6			2.0	40.0				
Approach LOS	Α			Α	D				
Intersection Summary									
HCM 2000 Control Delay			3.6	Н	CM 2000	Level of Service	<u></u>	А	
HCM 2000 Volume to Capa	city ratio		0.53						
Actuated Cycle Length (s)	-		101.5	S	um of lost	time (s)		8.0	
Intersection Capacity Utiliza	ation		63.0%			of Service		В	
Analysis Period (min)			15						
c Critical Lane Group									

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }		ሻ	<b>^</b>	W	71311		
Volume (vph)	869	19	74	1316	44	30		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.94			
Flt Protected	1.00		0.95	1.00	0.97			
Satd. Flow (prot)	3008		1509	3018	1458			
Flt Permitted	1.00		0.28	1.00	0.97			
Satd. Flow (perm)	3008		448	3018	1458			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	945	21	80	1430	48	33		
RTOR Reduction (vph)	1	0	0	0	27	0		
Lane Group Flow (vph)	965	0	80	1430	54	0		
Turn Type	NA	0	Perm	NA	Prot	0		
Protected Phases	2		r Cilli	6	8			
Permitted Phases	Z		6	U	Ü			
Actuated Green, G (s)	79.8		79.8	79.8	12.2			
Effective Green, g (s)	79.8		79.8	79.8	12.2			
Actuated g/C Ratio	0.80		0.80	0.80	0.12			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2400		357	2408	177			
v/s Ratio Prot	0.32		337	c0.47	c0.04			
v/s Ratio Perm	0.32		0.18	CU.47	CU.U4			
v/c Ratio	0.40		0.16	0.59	0.30			
Uniform Delay, d1	3.0		2.5	3.9	40.0			
Progression Factor	1.00		0.27	0.20	1.00			
Incremental Delay, d2	0.5		1.1	0.20	1.00			
Delay (s)	3.5		1.1	1.6	41.0			
Level of Service	3.5 A		1.8 A	1.0 A	41.0 D			
	3.5		A	1.6	41.0			
Approach LOS								
Approach LOS	А			Α	D			
Intersection Summary								
HCM 2000 Control Delay			3.6	Н	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capa	acity ratio		0.56					
Actuated Cycle Length (s)			100.0	S	um of lost	time (s)	8.5	
Intersection Capacity Utiliza	ation		60.6%	IC	CU Level o	of Service	В	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4₽	<b>∱</b> }		W	
Volume (veh/h)	1	899	1335	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	977	1451	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1451				1942	726
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1451				1942	726
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	463				57	367
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB1	
Volume Total	327	651	967	484	0	
Volume Left	1	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	463	1700	1700	1700	1700	
Volume to Capacity	0.00	0.38	0.57	0.28	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.1	0.0	0.0	0.0	0.0	
Lane LOS	Α				Α	
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utiliz	zation		46.6%	IC	U Level c	f Service
Analysis Period (min)			15			
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ř	<b>∱</b> ∱		Ť	<b>∱</b> β		ň	<b>∱</b> î≽		Ť	<b>∱</b> ∱	
Volume (vph)	230	1067	66	107	815	101	45	985	160	54	695	141
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2991		1509	2968		1509	2955		1509	2942	
Flt Permitted	0.23	1.00		0.15	1.00		0.16	1.00		0.11	1.00	
Satd. Flow (perm)	360	2991		245	2968		254	2955		176	2942	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	242	1123	69	113	858	106	47	1037	168	57	732	148
RTOR Reduction (vph)	0	4	0	0	10	0	0	13	0	0	17	0
Lane Group Flow (vph)	242	1188	0	113	954	0	47	1192	0	57	863	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	201	1674		137	1662		91	1063		63	1059	
v/s Ratio Prot		0.40			0.32			c0.40			0.29	
v/s Ratio Perm	c0.67			0.46			0.19			0.32		
v/c Ratio	1.20	0.71		0.82	0.57		0.52	1.12		0.90	0.82	
Uniform Delay, d1	22.0	16.1		18.0	14.3		25.2	32.0		30.4	29.0	
Progression Factor	1.00	1.00		1.00	1.00		0.93	0.94		1.00	1.00	
Incremental Delay, d2	129.3	2.6		40.8	1.4		19.3	67.3		88.5	6.9	
Delay (s)	151.3	18.6		58.8	15.7		42.8	97.6		118.9	35.9	
Level of Service	F	В		Ε	В		D	F		F	D	
Approach Delay (s)		41.0			20.2			95.5			41.0	
Approach LOS		D			С			F			D	
Intersection Summary												
HCM 2000 Control Delay			50.8	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capa	city ratio		1.17									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utiliza	tion		105.0%	IC	CU Level	of Service	:		G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>∱</b> 1>			414	W		
Volume (vph)	1227	32	18	963	79	36	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)	4.0			4.0	4.0		
Lane Util. Factor	0.95			0.95	1.00		
Frt	1.00			1.00	0.96		
Flt Protected	1.00			1.00	0.97		
Satd. Flow (prot)	3006			3015	1470		
Flt Permitted	1.00			0.91	0.97		
Satd. Flow (perm)	3006			2758	1470		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	1292	34	19	1014	83	38	
RTOR Reduction (vph)	2	0	0	0	20	0	
Lane Group Flow (vph)	1324	0	0	1033	101	0	
Turn Type	NA		Perm	NA	Prot		
Protected Phases	2			2	4		
Permitted Phases			2				
Actuated Green, G (s)	67.1			67.1	12.3		
Effective Green, g (s)	69.7			69.7	12.3		
Actuated g/C Ratio	0.77			0.77	0.14		
Clearance Time (s)	6.6			6.6	4.0		
Vehicle Extension (s)	5.0			5.0	3.0		
Lane Grp Cap (vph)	2327			2135	200		
v/s Ratio Prot	c0.44				c0.07		
v/s Ratio Perm				0.37			
v/c Ratio	0.57			0.48	0.51		
Uniform Delay, d1	4.1			3.7	36.0		
Progression Factor	0.19			1.00	1.00		
Incremental Delay, d2	0.7			0.8	2.0		
Delay (s)	1.5			4.4	38.0		
Level of Service	A			A	D		
Approach Delay (s)	1.5			4.4	38.0		
Approach LOS	Α			А	D		
Intersection Summary							
HCM 2000 Control Delay			4.5	H	CM 2000	Level of Service	
HCM 2000 Volume to Capa	city ratio		0.56				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utiliza	ition		61.2%	IC	U Level o	f Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β		Ť	ħβ			र्स	7		4	
Volume (vph)	84	1104	42	106	896	59	52	213	56	52	162	31
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	3001		1509	2990			1573	1350		1545	
Flt Permitted	0.24	1.00		0.19	1.00			0.84	1.00		0.68	
Satd. Flow (perm)	389	3001		294	2990			1334	1350		1064	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	88	1162	44	112	943	62	55	224	59	55	171	33
RTOR Reduction (vph)	0	3	0	0	5	0	0	0	45	0	6	0
Lane Group Flow (vph)	88	1203	0	112	1000	0	0	279	14	0	253	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	259	2000		196	1993			326	330		260	
v/s Ratio Prot		c0.40			0.33							
v/s Ratio Perm	0.23			0.38				0.21	0.01		c0.24	
v/c Ratio	0.34	0.60		0.57	0.50			0.86	0.04		0.97	
Uniform Delay, d1	6.5	8.3		8.1	7.5			32.5	26.0		33.7	
Progression Factor	1.00	1.00		0.69	0.46			1.00	1.00		1.00	
Incremental Delay, d2	3.5	1.3		8.2	0.6			19.2	0.1		48.0	
Delay (s)	10.0	9.7		13.8	4.1			51.7	26.0		81.7	
Level of Service	Α	Α		В	Α			D	С		F	
Approach Delay (s)		9.7			5.1			47.2			81.7	
Approach LOS		Α			Α			D			F	
Intersection Summary												
HCM 2000 Control Delay			18.4	H	CM 2000	Level of	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.70									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		91.1%	IC	U Level o	of Service	;		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> }		ሻ	ħβ		ሻ	<b>^</b>	7	ሻ	<b>∱</b> }	
Volume (vph)	338	1076	77	190	693	105	83	677	128	104	663	53
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2987		1509	2958		1509	3018	1350	1509	2984	
Flt Permitted	0.24	1.00		0.10	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	380	2987		166	2958		264	3018	1350	260	2984	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	356	1133	81	200	729	111	87	713	135	109	698	56
RTOR Reduction (vph)	0	5	0	0	12	0	0	0	68	0	6	0
Lane Group Flow (vph)	356	1209	0	200	828	0	87	713	67	109	748	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		32.1	25.1	25.1	31.2	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		30.1	25.2	25.2	30.2	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	265	1403		166	1390		154	760	340	150	746	
v/s Ratio Prot	c0.08	0.40		0.07	0.28		0.03	0.24		c0.04	c0.25	
v/s Ratio Perm	c0.62			0.55			0.14		0.05	0.18		
v/c Ratio	1.34	0.86		1.20	0.60		0.56	0.94	0.20	0.73	1.00	
Uniform Delay, d1	22.5	23.6		18.7	19.5		27.6	36.6	29.4	27.7	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.72	0.63	
Incremental Delay, d2	177.6	7.2		135.5	1.9		14.2	20.6	1.3	12.5	31.9	
Delay (s)	200.1	30.8		154.3	21.4		41.7	57.3	30.7	32.4	55.6	
Level of Service	F	С		F	С		D	E	С	С	Е	
Approach Delay (s)		69.2			46.9			52.0			52.7	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			57.1	Н	CM 2000	Level of	Service		E			
HCM 2000 Volume to Capa	city ratio		1.18									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ation		92.3%	IC	CU Level	of Service	)		F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	*	<b>^</b>	<b>↑</b> ↑		¥		
Volume (vph)	99	1316	931	32	22	45	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)	4.0	4.0	4.0		4.0		
Lane Util. Factor	1.00	0.95	0.95		1.00		
Frt	1.00	1.00	0.99		0.91		
Flt Protected	0.95	1.00	1.00		0.98		
Satd. Flow (prot)	1509	3018	3003		1421		
Flt Permitted	0.26	1.00	1.00		0.98		
Satd. Flow (perm)	407	3018	3003		1421		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	108	1430	1012	35	24	49	
RTOR Reduction (vph)	0	0	2	0	43	0	
Lane Group Flow (vph)	108	1430	1045	0	30	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	6		4		
Permitted Phases	2						
Actuated Green, G (s)	81.4	81.4	81.4		12.1		
Effective Green, g (s)	80.9	80.9	80.9		12.6		
Actuated g/C Ratio	0.80	0.80	0.80		0.12		
Clearance Time (s)	3.5	3.5	3.5		4.5		
Vehicle Extension (s)	0.2	0.2	0.2		3.0		
Lane Grp Cap (vph)	324	2405	2393		176		
v/s Ratio Prot		c0.47	0.35		c0.02		
v/s Ratio Perm	0.27						
v/c Ratio	0.33	0.59	0.44		0.17		
Uniform Delay, d1	2.8	4.0	3.2		39.8		
Progression Factor	0.25	0.21	1.00		1.00		
Incremental Delay, d2	2.2	0.9	0.6		0.5		
Delay (s)	2.9	1.7	3.8		40.2		
Level of Service	Α	Α	Α		D		
Approach Delay (s)		1.8	3.8		40.2		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			3.6	H	CM 2000	Level of Service	
HCM 2000 Volume to Capac	city ratio		0.54				
Actuated Cycle Length (s)			101.5		um of lost		
Intersection Capacity Utiliza	tion		65.5%	IC	U Level c	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }			<b>€</b> 1Ъ						4	
Volume (vph)	73	1292	4	8	936	89	0	0	0	38	5	55
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			0.99						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3016			2977						1439	
Flt Permitted	0.24	1.00			0.94						0.98	
Satd. Flow (perm)	375	3016			2811						1439	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	79	1404	4	8	1017	97	0	0	0	41	5	60
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	53	0
Lane Group Flow (vph)	79	1408	0	0	1117	0	0	0	0	0	53	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	80.5	80.5			80.5						11.0	
Effective Green, g (s)	80.5	80.5			80.5						11.0	
Actuated g/C Ratio	0.80	0.80			0.80						0.11	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	301	2427			2262						158	
v/s Ratio Prot		c0.47									c0.04	
v/s Ratio Perm	0.21				0.40							
v/c Ratio	0.26	0.58			0.49						0.34	
Uniform Delay, d1	2.4	3.6			3.2						41.1	
Progression Factor	0.26	0.21			0.81						1.00	
Incremental Delay, d2	1.7	8.0			0.7						1.3	
Delay (s)	2.4	1.6			3.3						42.4	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.6			3.3			0.0			42.4	
Approach LOS		Α			Α			Α			D	
Intersection Summary												
HCM 2000 Control Delay			3.9	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.55									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizat	ion		85.0%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> }		ň	<b>↑</b> ↑		ň	ĵ»		ሻ	ĵ»	
Volume (vph)	3	1345	42	52	951	1	40	236	48	10	184	56
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	3004		1509	3017		1509	1548		1509	1533	
Flt Permitted	0.25	1.00		0.13	1.00		0.38	1.00		0.30	1.00	
Satd. Flow (perm)	395	3004		206	3017		608	1548		476	1533	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	1416	44	55	1001	1	42	248	51	11	194	59
RTOR Reduction (vph)	0	2	0	0	0	0	0	8	0	0	12	0
Lane Group Flow (vph)	3	1458	0	55	1002	0	42	291	0	11	241	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.6	68.6		68.6	68.6		23.4	23.4		23.4	23.4	
Effective Green, g (s)	68.6	68.6		68.6	68.6		23.4	23.4		23.4	23.4	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	270	2060		141	2069		142	362		111	358	
v/s Ratio Prot		c0.49			0.33			c0.19			0.16	
v/s Ratio Perm	0.01			0.27			0.07			0.02		
v/c Ratio	0.01	0.71		0.39	0.48		0.30	0.80		0.10	0.67	
Uniform Delay, d1	5.0	9.6		6.7	7.4		31.5	36.1		30.0	34.8	
Progression Factor	0.59	0.67		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.7		7.9	8.0		1.2	12.1		0.4	4.9	
Delay (s)	3.0	8.2		14.7	8.2		32.7	48.2		30.4	39.7	
Level of Service	Α	Α		В	Α		С	D		С	D	
Approach Delay (s)		8.1			8.5			46.3			39.3	
Approach LOS		Α			Α			D			D	
Intersection Summary												
HCM 2000 Control Delay			15.1	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.73									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		82.0%	IC	CU Level of	of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		*	<b>∱</b> }		¥	<b>∱</b> }	
Volume (vph)	41	285	32	58	106	58	31	920	195	68	833	30
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.96		1.00	0.97		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1560			1513		1509	2939		1509	3002	
Flt Permitted		0.95			0.85		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1485			1310		397	2939		397	3002	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	43	300	34	61	112	61	33	968	205	72	877	32
RTOR Reduction (vph)	0	9	0	0	25	0	0	45	0	0	7	0
Lane Group Flow (vph)	0	368	0	0	209	0	33	1128	0	72	902	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		594			524		158	1175		158	1200	
v/s Ratio Prot								c0.38			0.30	
v/s Ratio Perm		c0.25			0.16		0.08			0.18		
v/c Ratio		0.62			0.40		0.21	0.96		0.46	0.75	
Uniform Delay, d1		9.6			8.6		7.9	11.7		8.8	10.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.8			2.3		3.0	18.3		9.2	4.4	
Delay (s)		14.4			10.8		10.8	29.9		18.0	14.7	
Level of Service		В			В		В	С		В	В	
Approach Delay (s)		14.4			10.8			29.4			14.9	
Approach LOS		В			В			С			В	
Intersection Summary												
HCM 2000 Control Delay			20.8	Н	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capacity	ratio		0.79									
Actuated Cycle Length (s)			40.0	S	um of lost	time (s)			8.0			
Intersection Capacity Utilization	n		78.8%	IC	CU Level	of Service			D			
Analysis Period (min)			15									

c Critical Lane Group

	•	<b>→</b>	•	•	<b>\</b>	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		41₽	<b>↑</b> ↑		¥		
Volume (vph)	52	1223	1012	43	36	29	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	0.99		0.94		
Flt Protected		1.00	1.00		0.97		
Satd. Flow (prot)		3011	2999		1452		
Flt Permitted		0.84	1.00		0.97		
Satd. Flow (perm)		2531	2999		1452		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	57	1329	1100	47	39	32	
RTOR Reduction (vph)	0	0	3	0	28	0	
Lane Group Flow (vph)	0	1386	1144	0	43	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		67.1	67.1		12.3		
Effective Green, g (s)		69.7	69.7		12.3		
Actuated g/C Ratio		0.77	0.77		0.14		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		1960	2322		198		
v/s Ratio Prot			0.38		c0.03		
v/s Ratio Perm		c0.55					
v/c Ratio		0.71	0.49		0.22		
Uniform Delay, d1		5.1	3.7		34.6		
Progression Factor		1.00	0.38		1.00		
Incremental Delay, d2		2.2	0.7		0.6		
Delay (s)		7.2	2.1		35.1		
Level of Service		Α	Α		D		
Approach Delay (s)		7.2	2.1		35.1		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			5.7	H	CM 2000	Level of Service	
HCM 2000 Volume to Capaci	ity ratio		0.63				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utilizati	on		94.2%	IC	U Level o	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }	20.1	*	<b>^</b>	W			
Volume (vph)	1358	22	35	944	44	72		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3010		1509	3018	1428			
Flt Permitted	1.00		0.15	1.00	0.98			
Satd. Flow (perm)	3010		234	3018	1428			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1476	24	38	1026	48	78		
RTOR Reduction (vph)	1	0	0	0	57	0		
Lane Group Flow (vph)	1499	0	38	1026	69	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	4			
Permitted Phases	<del>-</del>		6	-	•			
Actuated Green, G (s)	81.4		81.4	81.4	12.1			
Effective Green, g (s)	80.9		80.9	80.9	12.6			
Actuated g/C Ratio	0.80		0.80	0.80	0.12			
Clearance Time (s)	3.5		3.5	3.5	4.5			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2399		186	2405	177			
v/s Ratio Prot	c0.50			0.34	c0.05			
v/s Ratio Perm			0.16					
v/c Ratio	0.62		0.20	0.43	0.39			
Uniform Delay, d1	4.2		2.5	3.2	40.9			
Progression Factor	1.00		0.28	0.25	1.00			
Incremental Delay, d2	1.2		2.3	0.5	1.4			
Delay (s)	5.4		3.0	1.3	42.3			
Level of Service	А		А	А	D			
Approach Delay (s)	5.4			1.4	42.3			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			5.5	Н	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capa	acity ratio		0.59					
Actuated Cycle Length (s)	•		101.5		um of lost		8.0	
Intersection Capacity Utiliza	ation		59.6%	IC	CU Level o	of Service	В	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }	20.1	ሻ	<b>^</b>	W			
Volume (vph)	1301	26	48	956	60	56		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.93			
Flt Protected	1.00		0.95	1.00	0.97			
Satd. Flow (prot)	3009		1509	3018	1447			
Flt Permitted	1.00		0.16	1.00	0.97			
Satd. Flow (perm)	3009		255	3018	1447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1414	28	52	1039	65	61		
RTOR Reduction (vph)	1	0	0	0	37	0		
Lane Group Flow (vph)	1441	0	52	1039	89	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	8			
Permitted Phases	<del>-</del>		6	-	_			
Actuated Green, G (s)	80.5		80.5	80.5	11.5			
Effective Green, g (s)	80.5		80.5	80.5	11.5			
Actuated g/C Ratio	0.80		0.80	0.80	0.12			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2422		205	2429	166			
v/s Ratio Prot	c0.48			0.34	c0.06			
v/s Ratio Perm			0.20					
v/c Ratio	0.59		0.25	0.43	0.54			
Uniform Delay, d1	3.6		2.4	2.9	41.7			
Progression Factor	1.00		0.27	0.26	1.00			
Incremental Delay, d2	1.1		2.6	0.5	3.3			
Delay (s)	4.7		3.3	1.3	45.0			
Level of Service	А		А	А	D			
Approach Delay (s)	4.7			1.4	45.0			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			5.3	Н	CM 2000	Level of Service	 А	
HCM 2000 Volume to Capa	acity ratio		0.59					
Actuated Cycle Length (s)			100.0		um of lost		8.5	
Intersection Capacity Utiliza	ation		61.4%	IC	CU Level o	of Service	В	
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	+	4	<b>\</b>	4
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41₽	<b>∱</b> }		W	
Volume (veh/h)	16	1364	957	40	4	25
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	1483	1040	43	4	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1084				1838	542
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1084				1838	542
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				93	94
cM capacity (veh/h)	639				65	485
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	512	988	693	390	32	
Volume Left	17	0	0	0	4	
Volume Right	0	0	0	43	27	
cSH	639	1700	1700	1700	257	
Volume to Capacity	0.03	0.58	0.41	0.23	0.12	
Queue Length 95th (ft)	2	0	0	0	10	
Control Delay (s)	0.8	0.0	0.0	0.0	21.0	
Lane LOS	А				С	
Approach Delay (s)	0.3		0.0		21.0	
Approach LOS					С	
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utiliz	zation		67.4%	IC	U Level o	of Service
Analysis Period (min)			15			

	۶	<b>→</b>	•	•	<b>←</b>	4	1	<b>†</b>	~	<b>\</b>	<b>↓</b>	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ∱		ሻ	<b>∱</b> ∱		ሻ	<b>∱</b> ∱		7	<b>∱</b> ∱	
Volume (vph)	113	672	156	259	1190	61	132	775	50	60	915	355
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2932		1509	2996		1509	2990		1509	2891	
Flt Permitted	0.12	1.00		0.26	1.00		0.11	1.00		0.16	1.00	
Satd. Flow (perm)	192	2932		415	2996		176	2990		262	2891	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	707	164	273	1253	64	139	816	53	63	963	374
RTOR Reduction (vph)	0	13	0	0	4	0	0	4	0	0	35	0
Lane Group Flow (vph)	119	858	0	273	1313	0	139	865	0	63	1302	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	107	1641		232	1677		63	1076		94	1040	
v/s Ratio Prot		0.29			0.44			0.29			0.45	
v/s Ratio Perm	0.62			c0.66			c0.79			0.24		
v/c Ratio	1.11	0.52		1.18	0.78		2.21	0.80		0.67	1.25	
Uniform Delay, d1	22.0	13.7		22.0	17.2		32.0	28.8		27.0	32.0	
Progression Factor	1.00	1.00		1.00	1.00		0.98	0.96		1.00	1.00	
Incremental Delay, d2	120.4	1.2		115.2	3.7		590.5	6.3		32.0	121.6	
Delay (s)	142.4	14.9		137.2	21.0		621.9	34.1		59.0	153.6	
Level of Service	F	В		F	С		F	С		Е	F	
Approach Delay (s)		30.2			40.9			115.2			149.3	
Approach LOS		С			D			F			F	
Intersection Summary												
HCM 2000 Control Delay			84.2	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capac	city ratio		1.57									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	tion		114.1%	IC	U Level of	of Service			Н			
Analysis Period (min)			15									
c Critical Lane Group												

	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	<i>&gt;</i>	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>∱</b> 1>			414	**		
Volume (vph)	873	20	29	1434	29	14	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)	4.0			4.0	4.0		
Lane Util. Factor	0.95			0.95	1.00		
Frt	1.00			1.00	0.96		
Flt Protected	1.00			1.00	0.97		
Satd. Flow (prot)	3008			3015	1469		
Flt Permitted	1.00			0.92	0.97		
Satd. Flow (perm)	3008			2771	1469		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	919	21	31	1509	31	15	
RTOR Reduction (vph)	1	0	0	0	13	0	
Lane Group Flow (vph)	939	0	0	1540	33	0	
Turn Type	NA		Perm	NA	Prot		
Protected Phases	2			2	4		
Permitted Phases			2				
Actuated Green, G (s)	70.2			70.2	9.2		
Effective Green, g (s)	72.8			72.8	9.2		
Actuated g/C Ratio	0.81			0.81	0.10		
Clearance Time (s)	6.6			6.6	4.0		
Vehicle Extension (s)	5.0			5.0	3.0		
Lane Grp Cap (vph)	2433			2241	150		
v/s Ratio Prot	0.31				c0.02		
v/s Ratio Perm				c0.56			
v/c Ratio	0.39			0.69	0.22		
Uniform Delay, d1	2.4			3.7	37.1		
Progression Factor	0.23			1.00	1.00		
Incremental Delay, d2	0.4			1.7	0.7		
Delay (s)	1.0			5.4	37.8		
Level of Service	Α			A	D		
Approach Delay (s)	1.0			5.4	37.8		
Approach LOS	Α			А	D		
Intersection Summary			4.4	11/	214 2002	Lavalat Carab	
HCM 2000 Control Delay	-11		4.4	H(	JM 2000	Level of Service	!
HCM 2000 Volume to Capac	city ratio		0.63	_		11mm = (m)	
Actuated Cycle Length (s)	tion		90.0		um of lost		
Intersection Capacity Utiliza	uon		85.7%	IC	U Level c	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

	۶	<b>→</b>	$\rightarrow$	•	<b>←</b>	•	•	<b>†</b>	/	<b>&gt;</b>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	<b>∱</b> ∱		Ť	ħβ			र्स	7		4	
Volume (vph)	50	797	36	89	1222	39	30	168	62	73	255	98
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	2998		1509	3004			1576	1350		1526	
Flt Permitted	0.15	1.00		0.29	1.00			0.79	1.00		0.78	
Satd. Flow (perm)	246	2998		460	3004			1255	1350		1194	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	839	38	94	1286	41	32	177	65	77	268	103
RTOR Reduction (vph)	0	4	0	0	2	0	0	0	49	0	12	0
Lane Group Flow (vph)	53	873	0	94	1325	0	0	209	16	0	436	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	164	1998		306	2002			306	330		291	
v/s Ratio Prot		0.29			c0.44							
v/s Ratio Perm	0.22			0.20				0.17	0.01		c0.37	
v/c Ratio	0.32	0.44		0.31	0.66			0.68	0.05		1.50	
Uniform Delay, d1	6.4	7.1		6.3	8.9			30.8	26.0		34.0	
Progression Factor	1.00	1.00		0.44	0.51			1.00	1.00		1.00	
Incremental Delay, d2	5.2	0.7		1.8	1.2			6.2	0.1		241.4	
Delay (s)	11.5	7.8		4.6	5.8			37.0	26.1		275.4	
Level of Service	В	Α		Α	Α			D	С		F	
Approach Delay (s)		8.0			5.7			34.4			275.4	
Approach LOS		Α			Α			С			F	
Intersection Summary												
HCM 2000 Control Delay			48.3	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	ity ratio		0.88									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizat	ion	•	102.5%	IC	CU Level of	of Service	)		G			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	•	1	<b>†</b>	<i>&gt;</i>	<b>/</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ∱		ሻ	ħβ		*	<b>^</b>	7	ሻ	<b>∱</b> ∱	
Volume (vph)	184	906	106	388	1231	107	156	714	127	113	830	107
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2970		1509	2981		1509	3018	1350	1509	2966	
Flt Permitted	0.09	1.00		0.15	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	138	2970		241	2981		265	3018	1350	260	2966	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	194	954	112	408	1296	113	164	752	134	119	874	113
RTOR Reduction (vph)	0	9	0	0	6	0	0	0	64	0	10	0
Lane Group Flow (vph)	194	1057	0	408	1403	0	164	752	70	119	977	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		32.0	25.0	25.0	31.3	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		30.0	25.1	25.1	30.3	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	154	1395		201	1401		154	757	338	152	741	
v/s Ratio Prot	0.08	0.36		c0.12	0.47		c0.06	0.25		0.05	c0.33	
v/s Ratio Perm	0.58			c0.93			0.26		0.05	0.19		
v/c Ratio	1.26	0.76		2.03	1.00		1.06	0.99	0.21	0.78	1.32	
Uniform Delay, d1	23.3	21.8		20.8	26.5		33.3	37.4	29.6	28.2	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.75	0.64	
Incremental Delay, d2	158.6	3.9		480.5	24.3		90.9	31.2	1.4	19.3	152.0	
Delay (s)	182.0	25.7		501.2	50.8		124.2	68.5	31.0	40.4	175.9	
Level of Service	F	С		F	D		F	E	С	D	F	
Approach Delay (s)		49.8			152.0			72.4			161.4	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay			113.4	Н	CM 2000	Level of	Service		F			
HCM 2000 Volume to Capa	city ratio		1.72									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	tion		112.9%	IC	CU Level	of Service	9		Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	ች	<b>^</b>	ħβ		W	-		
Volume (vph)	17	1196	1580	23	26	107		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95	0.95		1.00			
Frt	1.00	1.00	1.00		0.89			
Flt Protected	0.95	1.00	1.00		0.99			
Satd. Flow (prot)	1509	3018	3011		1402			
Flt Permitted	0.10	1.00	1.00		0.99			
Satd. Flow (perm)	164	3018	3011		1402			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	18	1300	1717	25	28	116		
RTOR Reduction (vph)	0	0	1	0	34	0		
Lane Group Flow (vph)	18	1300	1741	0	110	0		
Turn Type	Perm	NA	NA		Prot			
Protected Phases		2	6		4			
Permitted Phases	2							
Actuated Green, G (s)	79.9	79.9	79.9		13.6			
Effective Green, g (s)	79.4	79.4	79.4		14.1			
Actuated g/C Ratio	0.78	0.78	0.78		0.14			
Clearance Time (s)	3.5	3.5	3.5		4.5			
Vehicle Extension (s)	0.2	0.2	0.2		3.0			
Lane Grp Cap (vph)	128	2360	2355		194			
v/s Ratio Prot		0.43	c0.58		c0.08			
v/s Ratio Perm	0.11							
v/c Ratio	0.14	0.55	0.74		0.56			
Uniform Delay, d1	2.7	4.2	5.7		40.8			
Progression Factor	0.25	0.19	1.00		1.00			
Incremental Delay, d2	2.0	0.8	2.1		3.7			
Delay (s)	2.7	1.6	7.8		44.6			
Level of Service	А	Α	A		D			
Approach Delay (s)		1.6	7.8		44.6			
Approach LOS		А	А		D			
Intersection Summary								
HCM 2000 Control Delay			6.9	H	CM 2000	Level of Service	9	Α
HCM 2000 Volume to Capac	city ratio		0.71					
Actuated Cycle Length (s)			101.5		um of lost			8.0
Intersection Capacity Utilizat	tion		68.2%	IC	U Level o	of Service		С
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	~	<b>/</b>	ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> 1≽			<b>€</b> 1₽						4	
Volume (vph)	31	1162	23	4	1612	25	0	0	0	37	8	70
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			1.00						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3009			3010						1434	
Flt Permitted	0.10	1.00			0.95						0.98	
Satd. Flow (perm)	161	3009			2869						1434	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	34	1263	24	4	1752	27	0	0	0	40	8	76
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	0	0	35	0
Lane Group Flow (vph)	34	1286	0	0	1782	0	0	0	0	0	89	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	80.1	80.1			80.1						11.4	
Effective Green, g (s)	80.1	80.1			80.1						11.4	
Actuated g/C Ratio	0.80	0.80			0.80						0.11	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	128	2410			2298						163	
v/s Ratio Prot		0.43									c0.06	
v/s Ratio Perm	0.21				c0.62							
v/c Ratio	0.27	0.53			0.78						0.54	
Uniform Delay, d1	2.5	3.5			5.2						41.8	
Progression Factor	0.19	0.18			0.59						1.00	
Incremental Delay, d2	4.3	0.7			1.7						3.7	
Delay (s)	4.8	1.4			4.8						45.5	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.5			4.8			0.0			45.5	
Approach LOS		Α			Α			А			D	
Intersection Summary												
HCM 2000 Control Delay			5.0	Н	CM 2000	Level of S	Service		А			
HCM 2000 Volume to Capac	ity ratio		0.75									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizat	ion		71.5%	IC	CU Level of	of Service			С			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	/	<b>&gt;</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> }		¥	<b>∱</b> }		¥	f)		¥	ĵ»	
Volume (vph)	76	1145	58	54	1489	64	53	108	27	85	192	90
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2996		1509	2999		1509	1541		1509	1512	
Flt Permitted	0.10	1.00		0.17	1.00		0.30	1.00		0.59	1.00	
Satd. Flow (perm)	155	2996		277	2999		474	1541		940	1512	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	80	1205	61	57	1567	67	56	114	28	89	202	95
RTOR Reduction (vph)	0	3	0	0	2	0	0	10	0	0	18	0
Lane Group Flow (vph)	80	1263	0	57	1632	0	56	132	0	89	279	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.9	68.9		68.9	68.9		23.1	23.1		23.1	23.1	
Effective Green, g (s)	68.9	68.9		68.9	68.9		23.1	23.1		23.1	23.1	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	2064		190	2066		109	355		217	349	
v/s Ratio Prot		0.42			c0.54			0.09			c0.18	
v/s Ratio Perm	0.52			0.21			0.12			0.09		
v/c Ratio	0.75	0.61		0.30	0.79		0.51	0.37		0.41	0.80	
Uniform Delay, d1	10.1	8.4		6.1	10.6		33.5	32.3		32.7	36.3	
Progression Factor	0.80	0.75		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	34.6	1.2		4.0	3.2		4.0	0.7		1.3	12.0	
Delay (s)	42.7	7.4		10.1	13.8		37.6	33.0		33.9	48.2	
Level of Service	D	Α		В	В		D	С		С	D	
Approach Delay (s)		9.5			13.6			34.3			44.9	
Approach LOS		Α			В			С			D	
Intersection Summary												
HCM 2000 Control Delay			16.6	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	ity ratio		0.79									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		102.4%	IC	CU Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		Ţ	ħβ		ň	ħβ	
Volume (vph)	64	106	32	156	284	42	70	895	24	32	1301	56
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.98			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1530			1545		1509	3006		1509	2999	
Flt Permitted		0.81			0.84		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1264			1318		397	3006		397	2999	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	112	34	164	299	44	74	942	25	34	1369	59
RTOR Reduction (vph)	0	6	0	0	8	0	0	5	0	0	8	0
Lane Group Flow (vph)	0	207	0	0	499	0	74	962	0	34	1420	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		505			527		158	1202		158	1199	
v/s Ratio Prot								0.32			c0.47	
v/s Ratio Perm		0.16			c0.38		0.19			0.09		
v/c Ratio		0.41			0.95		0.47	0.80		0.22	1.18	
Uniform Delay, d1		8.6			11.6		8.9	10.6		7.9	12.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			26.1		9.6	5.7		3.1	91.7	
Delay (s)		9.2			37.7		18.5	16.2		11.0	103.7	
Level of Service		A			D		В	В		В	F	
Approach Delay (s)		9.2			37.7			16.4			101.6	
Approach LOS		Α			D			В			F	
Intersection Summary												
HCM 2000 Control Delay			57.9	Н	CM 2000	Level of S	Service		Е			
HCM 2000 Volume to Capaci	ty ratio		1.06									
Actuated Cycle Length (s)			40.0		um of lost				8.0			
Intersection Capacity Utilization	on		99.5%	IC	CU Level o	of Service			F			
Analysis Period (min)			15									_
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	ħβ		¥	-	
Volume (vph)	15	861	1432	11	26	58	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	1.00		0.91		
Flt Protected		1.00	1.00		0.98		
Satd. Flow (prot)		3015	3014		1418		
Flt Permitted		0.91	1.00		0.98		
Satd. Flow (perm)		2749	3014		1418		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	16	936	1557	12	28	63	
RTOR Reduction (vph)	0	0	0	0	51	0	
Lane Group Flow (vph)	0	952	1569	0	40	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		70.2	70.2		9.2		
Effective Green, g (s)		72.8	72.8		9.2		
Actuated g/C Ratio		0.81	0.81		0.10		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		2223	2437		144		
v/s Ratio Prot			c0.52		c0.03		
v/s Ratio Perm		0.35					
v/c Ratio		0.43	0.64		0.28		
Uniform Delay, d1		2.5	3.4		37.3		
Progression Factor		1.00	0.16		1.00		
Incremental Delay, d2		0.6	1.0		1.0		
Delay (s)		3.1	1.6		38.4		
Level of Service		А	Α		D		
Approach Delay (s)		3.1	1.6		38.4		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			3.4	H	CM 2000	Level of Service	
HCM 2000 Volume to Capac	city ratio		0.60				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utilizat	ion		61.8%	IC	U Level o	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

	-	•	•	•	<b>\</b>	<i>&gt;</i>			
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	<b>†</b> }	20.1	ሻ	<b>^</b>	¥				
Volume (vph)	1158	9	64	1581	24	36			
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620			
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020			
Lane Util. Factor	0.95		1.00	0.95	1.00				
Frt	1.00		1.00	1.00	0.92				
Flt Protected	1.00		0.95	1.00	0.98				
Satd. Flow (prot)	3014		1509	3018	1431				
Flt Permitted	1.00		0.19	1.00	0.98				
Satd. Flow (perm)	3014		308	3018	1431				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	1259	10	70	1718	26	39			
RTOR Reduction (vph)	0	0	0	0	34	0			
Lane Group Flow (vph)	1269	0	70	1718	31	0			
Turn Type	NA		Perm	NA	Prot				
Protected Phases	2			6	4				
Permitted Phases	<del>-</del>		6	_	•				
Actuated Green, G (s)	79.9		79.9	79.9	13.6				
Effective Green, g (s)	79.4		79.4	79.4	14.1				
Actuated g/C Ratio	0.78		0.78	0.78	0.14				
Clearance Time (s)	3.5		3.5	3.5	4.5				
Vehicle Extension (s)	0.2		0.2	0.2	3.0				
Lane Grp Cap (vph)	2357		240	2360	198				
v/s Ratio Prot	0.42			c0.57	c0.02				
v/s Ratio Perm			0.23						
v/c Ratio	0.54		0.29	0.73	0.16				
Uniform Delay, d1	4.2		3.1	5.6	38.5				
Progression Factor	1.00		0.30	0.25	1.00				
Incremental Delay, d2	0.9		2.1	1.4	0.4				
Delay (s)	5.0		3.0	2.7	38.9				
Level of Service	А		Α	Α	D				
Approach Delay (s)	5.0			2.8	38.9				
Approach LOS	Α			Α	D				
Intersection Summary									
HCM 2000 Control Delay			4.4	Н	CM 2000	Level of Service	 А	<u> </u>	
HCM 2000 Volume to Capa	acity ratio		0.64						
Actuated Cycle Length (s)	_		101.5	S	um of lost	time (s)	8.0		
Intersection Capacity Utiliza	ation		72.0%	IC	CU Level o	of Service	С		
Analysis Period (min)			15						
c Critical Lane Group									

Movement		-	•	•	•	1	<b>/</b>		
Lane Configurations	Movement	FBT	FBR	WBI	WBT	NBI	NBR		
Volume (vph)			20.1						
Ideal Flow (yphp)			20				38		
Total Lost Lime (s)									
Lane Utili. Factor 0.95 1.00 0.95 1.00   Fit Protected 1.00 1.00 1.00 0.94   Fit Protected 1.00 0.95 1.00 0.97   Satd. Flow (prot) 3010 1509 3018 1450   Fit Permitted 1.00 0.19 1.00 0.97   Satd. Flow (prom) 3010 297 3018 1450   Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92   Adj. Flow (yph) 1292 22 80 1749 47 41   RTOR Reduction (yph) 1 0 0 0 35 0    Lane Group Flow (yph) 1313 0 80 1749 53 0    Turn Type NA Perm NA Prot Protected Phases 2 6 8   Permitted Phases 6    Actuated Green, G (s) 80.1 80.1 80.1 11.9   Effective Green, g (s) 80.1 80.1 80.1 11.9   Effective Green, g (s) 80.1 80.1 80.1 11.9   Clearance Time (s) 4.0 4.0 4.0 4.0   Vehicle Extension (s) 0.2 0.2 0.2 0.2 3.0   Lane Group (php) 2411 237 2417 172   Wis Ratio Prot 0.44 0.40 0.40   Vis Ratio Perm 0.54 0.34 0.72 0.31   Uniform Delay, d1 3.5 2.7 4.7 4.0 3   Progression Factor 1.00 0.21 0.15 1.00   Incremental Delay, d2 0.9 2.4 1.2 1.0   Delay (s) 4.4 3.0 1.9 41.3   Level of Service A A A D D   Approach LOS A B C   Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5   Intersection Summary   HCM 2000 Volume to Capacity ratio Analysis Period (min) 15			.020				.020		
Frit Protected 1.00 0.95 1.00 0.94 Fit Protected 1.00 0.95 1.00 0.97 Satd. Flow (prot) 3010 1509 3018 1450 Fit Permitted 1.00 0.19 1.00 0.97 Satd. Flow (perm) 3010 297 3018 1450 Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92 0.92 Addj. Flow (ph) 1292 22 80 1749 47 41 RTOR Reduction (vph) 1 0 0 0 35 0 Lane Group Flow (vph) 1313 0 80 1749 53 0 Turn Type NA Perm NA Prot Protected Phases 2 6 8 Permitted Phases 6 A Actuated Green, G (s) 80.1 80.1 80.1 11.9 Effective Green, g (s) 80.1 80.1 80.1 11.9 Actuated g/C Ratio 0.80 0.80 0.80 0.12 Clearance Time (s) 4.0 4.0 4.0 4.0 Vehicle Extension (s) 0.2 0.2 0.2 3.0 Lane Gro Cap (vph) 2411 237 2417 172 V/s Ratio Prot 0.44 V/s Ratio Prot 0.54 Uniform Delay, d1 3.5 2.7 4.7 40.3 Progression Factor 1.00 0.21 0.15 1.00 Incremental Delay, d2 0.9 2.4 1.2 1.0 Delay (s) 4.4 3.0 1.9 41.3 Level of Service A A A D Approach Delay 4.4 3.0 1.9 41.3 Level of Service A A A D Approach Delay 4.0 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.67 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5 ICU Level of Service C Analysis Period (min) 15									
Fil Protected 1.00 0.95 1.00 0.97 Satd. Flow (prot) 3010 1509 3018 1450 Fil Permitted 1.00 0.19 1.00 0.97 Satd. Flow (perm) 3010 297 3018 1450  Peak-hour factor, PHF 0.92 0.92 0.92 0.92 0.92 0.92 Adj. Flow (pph) 1292 22 80 1749 47 41 RTOR Reduction (vph) 1 0 0 0 35 0 Lane Group Flow (vph) 1313 0 80 1749 53 0 Turn Type NA Perm NA Prot Protected Phases 2 6 8 Permitted Phases 6 6 Actuated Green, G (s) 80.1 80.1 80.1 11.9 Effective Green, g (s) 80.1 80.1 80.1 11.9 Effective Green, g (s) 80.1 80.1 80.1 11.9 Effective Green, g (s) 4.0 4.0 4.0 Vehicle Extension (s) 0.2 0.2 0.2 3.0 Lane Group (vph) 2411 237 2417 172 w/s Ratio Prot 0.44 0.58 v/s Ratio Prot 0.54 0.34 0.72 0.31 Uniforn Delay, d1 3.5 2.7 4.7 40.3 Progression Factor 1.00 0.21 0.15 1.00 Incremental Delay, d2 0.9 2.4 1.2 1.0 Delay (s) 4.4 3.0 1.9 41.3 Level of Service A A A D Approach Delay (s) 4.4 Approach LOS A A D Intersection Summary HCM 2000 Volume to Capacity ratio 71.5% ICU Level of Service C Analysis Period (min) 15									
Satd. Flow (prot)         3010         1509         3018         1450           Fit Permitted         1.00         0.19         1.00         0.97           Satd. Flow (perm)         3010         297         3018         1450           Peak-hour factor, PHF         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         1292         22         80         1749         47         41           RTOR Reduction (vph)         1         0         0         0         35         0           Lane Group Flow (vph)         1313         0         80         1749         53         0           Turn Type         NA         Perm         NA         Prot         NA         Prot           Protected Phases         2         6         8         8         8           Permitted Phases         6         8         8         8         8         1         11.9         9         1         11.9         1         1.9         1         1.9         1         1.9         1         1.9         1         1.9         1         1.9         1         1.9         1         1.9         1         1.9									
Fit Permitted									
Satd. Flow (perm)         3010         297         3018         1450           Peak-hour factor, PHF         0.92         0.92         0.92         0.92         0.92           Adj. Flow (vph)         1292         22         80         1749         47         41           RTOR Reduction (vph)         1         0         0         0         35         0           Lane Group Flow (vph)         1313         0         80         1749         53         0           Turn Type         NA         Perm         NA         Prot         NA         Prot           Protected Phases         2         6         8         8         8         8           Actuated Green, G (s)         80.1         80.1         80.1         11.9         \$           Effective Green, g (s)         80.1         80.1         80.1         11.9         \$           Actuated g/C Ratio         0.80         0.80         0.80         0.12         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$         \$									
Peak-hour factor, PHF   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92   0.92									
Adj. Flow (vph)         1292         22         80         1749         47         41           RTOR Reduction (vph)         1         0         0         0         35         0           Lane Group Flow (vph)         1313         0         80         1749         53         0           Turn Type         NA         Perm         NA         Perm         Permitted Phases         6         8           Permitted Phases         6         8         8         Permitted Phases         6         8           Actuated Green, G (s)         80.1         80.1         80.1         11.9         Permitted Phases         8         Permitted Phases         6         8         Permitted Phases         8         Permitted Phases         6         8         Permitted Phases         8         Permitted Phases         8         Permitted Phases         9         8         8         Permitted Phases         8         Permitted Phases         8         Permitted Phases         8         Permitted Phases         8         9         0.12         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2			0.92				0.92		
RTOR Reduction (vph) 1 1 0 0 0 1749 53 0  Lane Group Flow (vph) 1313 0 80 1749 53 0  Turn Type NA Perm NA Prot  Protected Phases 2 6 8  Permitted Phases 66  Actuated Green, G (s) 80.1 80.1 80.1 11.9  Effective Green, g (s) 80.1 80.1 80.1 11.9  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 4.0 4.0 4.0 4.0  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 2411 237 2417 172  v/s Ratio Prot 0.44 0.54 0.34 0.72 0.31  Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Approach Delay (s) 4.4 2.0 41.3  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  Actuated Cycle Length (s) 100  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15									
Lane Group Flow (vph)         1313         0         80         1749         53         0           Turn Type         NA         Perm         NA         Prot           Protected Phases         6         8           Actuated Breen, G (s)         80.1         80.1         11.9           Effective Green, g (s)         80.1         80.1         11.9           Actuated g/C Ratio         0.80         0.80         0.80         0.12           Clearance Time (s)         4.0         4.0         4.0         4.0           Vehicle Extension (s)         0.2         0.2         3.0									
Turn Type NA Perm NA Prot Protected Phases 2 6 8 Permitted Phases 6 Actuated Green, G (s) 80.1 80.1 80.1 11.9 Effective Green, g (s) 80.1 80.1 80.1 11.9  Effective Green, g (s) 80.1 80.1 11.9  Clearance Time (s) 4.0 4.0 4.0 4.0  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 2411 237 2417 172  v/s Ratio Prot 0.44 c0.58 c0.04  v/s Ratio Perm 0.27  v/c Ratio 0.54 0.34 0.72 0.31  Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Level of Service A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A B D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio Actuated Cycle Length (s) 10.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15									
Protected Phases 2 6 8  Permitted Phases 6  Actuated Green, G (s) 80.1 80.1 80.1 11.9  Effective Green, g (s) 80.1 80.1 11.9  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 4.0 4.0 4.0 4.0  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 2411 237 2417 172  V/s Ratio Prot 0.44 c0.58 c0.04  V/s Ratio Perm 0.27  V/c Ratio 0.54 0.34 0.72 0.31  Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Level of Service A A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A B D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio Actuated Cycle Length (s) 10.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15									
Permitted Phases   6				1 CITII					
Actuated Green, G (s) 80.1 80.1 80.1 11.9  Effective Green, g (s) 80.1 80.1 11.9  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 4.0 4.0 4.0 4.0  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 2411 237 2417 172  v/s Ratio Prot 0.44 c.0.58 c0.04  v/s Ratio Perm 0.27  v/c Ratio 0.54 0.34 0.72 0.31  Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Level of Service A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  A HCM 2000 Volume to Capacity ratio 0.67  Actuated Cycle Length (s) 10.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15		2		6	U	U			
Effective Green, g (s) 80.1 80.1 80.1 11.9  Actuated g/C Ratio 0.80 0.80 0.80 0.12  Clearance Time (s) 4.0 4.0 4.0 4.0  Vehicle Extension (s) 0.2 0.2 0.2 3.0  Lane Grp Cap (vph) 2411 237 2417 172  v/s Ratio Prot 0.44 c0.58 c0.04  v/s Ratio Perm 0.27  v/c Ratio 0.54 0.34 0.72 0.31  Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Level of Service A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.67  Actuated Cycle Length (s) 10.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15		80.1			80.1	11 9			
Actuated g/C Ratio 0.80 0.80 0.80 0.12 Clearance Time (s) 4.0 4.0 4.0 4.0 Vehicle Extension (s) 0.2 0.2 0.2 3.0 Lane Grp Cap (vph) 2411 237 2417 172 v/s Ratio Prot 0.44 c0.58 c0.04 v/s Ratio Perm 0.27 v/c Ratio 0.54 0.34 0.72 0.31 Uniform Delay, d1 3.5 2.7 4.7 40.3 Progression Factor 1.00 0.21 0.15 1.00 Incremental Delay, d2 0.9 2.4 1.2 1.0 Delay (s) 4.4 3.0 1.9 41.3 Level of Service A A A D Approach Delay (s) 4.4 2.0 41.3 Approach LOS A A D  Intersection Summary HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.67 Actuated Cycle Length (s) 10.0 Sum of lost time (s) 8.5 Intersection Capacity Utilization 71.5% ICU Level of Service C Analysis Period (min) 15									
Clearance Time (s)         4.0         4.0         4.0         4.0           Vehicle Extension (s)         0.2         0.2         0.2         3.0           Lane Grp Cap (vph)         2411         237         2417         172           v/s Ratio Prot         0.44         c0.58         c0.04           v/s Ratio Perm         0.27          v/c Ratio         0.54         0.34         0.72         0.31           Uniform Delay, d1         3.5         2.7         4.7         40.3             Progression Factor         1.00         0.21         0.15         1.00	0 . ,								
Vehicle Extension (s)         0.2         0.2         0.2         3.0           Lane Grp Cap (vph)         2411         237         2417         172           v/s Ratio Prot         0.44         c0.58         c0.04           v/s Ratio Perm         0.27           v/c Ratio         0.54         0.34         0.72         0.31           Uniform Delay, d1         3.5         2.7         4.7         40.3           Progression Factor         1.00         0.21         0.15         1.00           Incremental Delay, d2         0.9         2.4         1.2         1.0           Delay (s)         4.4         3.0         1.9         41.3           Level of Service         A         A         A         D           Approach Delay (s)         4.4         2.0         41.3           Approach LOS         A         A         D           Intersection Summary           HCM 2000 Control Delay         4.0         HCM 2000 Level of Service         A           HCM 2000 Volume to Capacity ratio         0.67         A           Actuated Cycle Length (s)         100.0         Sum of lost time (s)         8.5           Intersection Capacity Utilization									
Lane Grp Cap (vph)       2411       237       2417       172         v/s Ratio Prot       0.44       c0.58       c0.04         v/s Ratio Perm       0.27         v/c Ratio       0.54       0.34       0.72       0.31         Uniform Delay, d1       3.5       2.7       4.7       40.3         Progression Factor       1.00       0.21       0.15       1.00         Incremental Delay, d2       0.9       2.4       1.2       1.0         Delay (s)       4.4       3.0       1.9       41.3         Level of Service       A       A       A       D         Approach Delay (s)       4.4       2.0       41.3         Approach LOS       A       A       D         Intersection Summary       HCM 2000 Control Delay       4.0       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.67       A       A       A         Actuated Cycle Length (s)       100.0       Sum of lost time (s)       8.5         Intersection Capacity Utilization       71.5%       ICU Level of Service       C         Analysis Period (min)       15	, ,								
V/s Ratio Prot       0.44       c0.58       c0.04         V/s Ratio Perm       0.27         V/c Ratio       0.54       0.34       0.72       0.31         Uniform Delay, d1       3.5       2.7       4.7       40.3         Progression Factor       1.00       0.21       0.15       1.00         Incremental Delay, d2       0.9       2.4       1.2       1.0         Delay (s)       4.4       3.0       1.9       41.3         Level of Service       A       A       A       D         Approach Delay (s)       4.4       2.0       41.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       4.0       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.67         Actuated Cycle Length (s)       100.0       Sum of lost time (s)       8.5         Intersection Capacity Utilization       71.5%       ICU Level of Service       C         Analysis Period (min)       15									
v/s Ratio Perm       0.27         v/c Ratio       0.54       0.34       0.72       0.31         Uniform Delay, d1       3.5       2.7       4.7       40.3         Progression Factor       1.00       0.21       0.15       1.00         Incremental Delay, d2       0.9       2.4       1.2       1.0         Delay (s)       4.4       3.0       1.9       41.3         Level of Service       A       A       D         Approach Delay (s)       4.4       2.0       41.3         Approach LOS       A       A       D         Intersection Summary       4.0       HCM 2000 Level of Service       A         HCM 2000 Control Delay       4.0       HCM 2000 Level of Service       A         Actuated Cycle Length (s)       100.0       Sum of lost time (s)       8.5         Intersection Capacity Utilization       71.5%       ICU Level of Service       C         Analysis Period (min)       15				237					
V/c Ratio       0.54       0.34       0.72       0.31         Uniform Delay, d1       3.5       2.7       4.7       40.3         Progression Factor       1.00       0.21       0.15       1.00         Incremental Delay, d2       0.9       2.4       1.2       1.0         Delay (s)       4.4       3.0       1.9       41.3         Level of Service       A       A       A       D         Approach Delay (s)       4.4       2.0       41.3         Approach LOS       A       A       D         Intersection Summary         HCM 2000 Control Delay       4.0       HCM 2000 Level of Service       A         HCM 2000 Volume to Capacity ratio       0.67         Actuated Cycle Length (s)       100.0       Sum of lost time (s)       8.5         Intersection Capacity Utilization       71.5%       ICU Level of Service       C         Analysis Period (min)       15		0.11		0.27	00.00	00.01			
Uniform Delay, d1 3.5 2.7 4.7 40.3  Progression Factor 1.00 0.21 0.15 1.00  Incremental Delay, d2 0.9 2.4 1.2 1.0  Delay (s) 4.4 3.0 1.9 41.3  Level of Service A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.67  Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15		0.54			0.72	0.31			
Progression Factor         1.00         0.21         0.15         1.00           Incremental Delay, d2         0.9         2.4         1.2         1.0           Delay (s)         4.4         3.0         1.9         41.3           Level of Service         A         A         A         D           Approach Delay (s)         4.4         2.0         41.3           Approach LOS         A         A         D           Intersection Summary           HCM 2000 Control Delay         4.0         HCM 2000 Level of Service         A           HCM 2000 Volume to Capacity ratio         0.67         Actuated Cycle Length (s)         100.0         Sum of lost time (s)         8.5           Intersection Capacity Utilization         71.5%         ICU Level of Service         C           Analysis Period (min)         15									
Incremental Delay, d2									
Delay (s)         4.4         3.0         1.9         41.3           Level of Service         A         A         A         D           Approach Delay (s)         4.4         2.0         41.3           Approach LOS         A         A         D           Intersection Summary           HCM 2000 Control Delay         4.0         HCM 2000 Level of Service         A           HCM 2000 Volume to Capacity ratio         0.67           Actuated Cycle Length (s)         100.0         Sum of lost time (s)         8.5           Intersection Capacity Utilization         71.5%         ICU Level of Service         C           Analysis Period (min)         15	o .								
Level of Service A A A D  Approach Delay (s) 4.4 2.0 41.3  Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.67  Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15	,								
Approach Delay (s) 4.4 2.0 41.3 Approach LOS A A D  Intersection Summary HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.67 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5 Intersection Capacity Utilization 71.5% ICU Level of Service C Analysis Period (min) 15									
Approach LOS A A D  Intersection Summary  HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A  HCM 2000 Volume to Capacity ratio 0.67  Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5  Intersection Capacity Utilization 71.5% ICU Level of Service C  Analysis Period (min) 15									
Intersection Summary  HCM 2000 Control Delay  4.0  HCM 2000 Level of Service  A  HCM 2000 Volume to Capacity ratio  0.67  Actuated Cycle Length (s)  100.0  Sum of lost time (s)  8.5  Intersection Capacity Utilization  71.5%  ICU Level of Service  C  Analysis Period (min)  15									
HCM 2000 Control Delay 4.0 HCM 2000 Level of Service A HCM 2000 Volume to Capacity ratio 0.67 Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5 Intersection Capacity Utilization 71.5% ICU Level of Service C Analysis Period (min) 15	• •								
HCM 2000 Volume to Capacity ratio0.67Actuated Cycle Length (s)100.0Sum of lost time (s)8.5Intersection Capacity Utilization71.5%ICU Level of ServiceCAnalysis Period (min)15				4 0	Н	CM 2000	Level of Service	Α	
Actuated Cycle Length (s) 100.0 Sum of lost time (s) 8.5 Intersection Capacity Utilization 71.5% ICU Level of Service C Analysis Period (min) 15	-	acity ratio				CIVI 2000	20101010010100	/ \	
Intersection Capacity Utilization 71.5% ICU Level of Service C Analysis Period (min) 15		aony rano			S	um of lost	time (s)	8.5	
Analysis Period (min) 15		ation							
		u				201010	2511100		
C CHIRCH LUIC CIVUU	c Critical Lane Group			10					

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41∱	<b>↑</b> ↑		W	
Volume (veh/h)	1	1203	1620	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1308	1761	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1761				2417	880
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1761				2417	880
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	351				27	290
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	437	872	1174	587	0	
Volume Left	1	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	351	1700	1700	1700	1700	
Volume to Capacity	0.00	0.51	0.69	0.35	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.1	0.0	0.0	0.0	0.0	
Lane LOS	Α				Α	
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utiliz	zation		55.9%	IC	U Level o	of Service
Analysis Period (min)			15			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ň	<b>∱</b> β		7	ħβ		Ţ	<b>∱</b> î≽		ň	<b>∱</b> î≽	
Volume (vph)	242	1221	127	122	960	105	128	1174	174	56	897	155
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2975		1509	2973		1509	2959		1509	2951	
Flt Permitted	0.17	1.00		0.10	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	277	2975		154	2973		176	2959		176	2951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	255	1285	134	128	1011	111	135	1236	183	59	944	163
RTOR Reduction (vph)	0	8	0	0	4	0	0	12	0	0	14	0
Lane Group Flow (vph)	255	1411	0	128	1118	0	135	1407	0	59	1093	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	155	1666		86	1664		63	1065		63	1062	
v/s Ratio Prot		0.47			0.38			0.48			0.37	
v/s Ratio Perm	c0.92			0.83			c0.77			0.33		
v/c Ratio	1.65	0.85		1.49	0.67		2.14	1.32		0.94	1.03	
Uniform Delay, d1	22.0	18.4		22.0	15.5		32.0	32.0		30.9	32.0	
Progression Factor	1.00	1.00		1.00	1.00		0.95	0.95		1.00	1.00	
Incremental Delay, d2	317.4	5.5		271.4	2.2		563.1	151.3		96.4	35.3	
Delay (s)	339.4	23.9		293.4	17.7		593.6	181.7		127.3	67.3	
Level of Service	F	С		F	В		F	F		F	Ε	
Approach Delay (s)		72.0			45.9			217.5			70.4	
Approach LOS		Е			D			F			E	
Intersection Summary												
HCM 2000 Control Delay			106.0	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.83									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utiliza	tion		118.9%	IC	CU Level of	of Service			Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> ↑			414	*/*			
Volume (vph)	1395	33	19	1125	82	37		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	.020	4.0	4.0	.020		
Lane Util. Factor	0.95			0.95	1.00			
Frt	1.00			1.00	0.96			
Flt Protected	1.00			1.00	0.97			
Satd. Flow (prot)	3007			3015	1471			
Flt Permitted	1.00			0.91	0.97			
Satd. Flow (perm)	3007			2741	1471			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	1468	35	20	1184	86	39		
RTOR Reduction (vph)	1	0	0	0	20	0		
Lane Group Flow (vph)	1502	0	0	1204	105	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2		1 01111	2	4			
Permitted Phases	-		2	-	•			
Actuated Green, G (s)	66.9		_	66.9	12.5			
Effective Green, g (s)	69.5			69.5	12.5			
Actuated g/C Ratio	0.77			0.77	0.14			
Clearance Time (s)	6.6			6.6	4.0			
Vehicle Extension (s)	5.0			5.0	3.0			
Lane Grp Cap (vph)	2322			2116	204			
v/s Ratio Prot	c0.50			2110	c0.07			
v/s Ratio Perm	00.00			0.44	00.07			
v/c Ratio	0.65			0.57	0.52			
Uniform Delay, d1	4.7			4.2	35.9			
Progression Factor	0.18			1.00	1.00			
Incremental Delay, d2	0.8			1.1	2.2			
Delay (s)	1.6			5.3	38.1			
Level of Service	А			Α	D			
Approach Delay (s)	1.6			5.3	38.1			
Approach LOS	A			A	D			
Intersection Summary	- 1							
HCM 2000 Control Delay			4.8	Н	CM 2000	Level of Service	A	
HCM 2000 Volume to Capa	acity ratio		0.63	11'	OIVI 2000	LCVCI OI JCI VICC	Λ	
Actuated Cycle Length (s)	acity ratio		90.0	Çı	um of lost	time (s)	8.0	
Intersection Capacity Utiliz	ation		67.3%		U Level o	. ,	0.0 C	
Analysis Period (min)	audii		15		O LEVELU	JCI VICE	U	
c Critical Lane Group			10					
c Childai Lane Group								

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ň	<b>∱</b> }			ર્ન	7		4	
Volume (vph)	125	1229	44	116	1024	96	54	294	63	82	226	63
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	3002		1509	2979			1576	1350		1535	
Flt Permitted	0.19	1.00		0.15	1.00			0.79	1.00		0.38	
Satd. Flow (perm)	306	3002		241	2979			1248	1350		593	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	132	1294	46	122	1078	101	57	309	66	86	238	66
RTOR Reduction (vph)	0	3	0	0	8	0	0	0	50	0	8	0
Lane Group Flow (vph)	132	1337	0	122	1171	0	0	366	16	0	382	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	204	2001		160	1986			305	330		144	
v/s Ratio Prot		0.45			0.39							
v/s Ratio Perm	0.43			c0.51				0.29	0.01		c0.64	
v/c Ratio	0.65	0.67		0.76	0.59			1.20	0.05		2.65	
Uniform Delay, d1	8.8	9.0		10.2	8.2			34.0	26.0		34.0	
Progression Factor	1.00	1.00		0.87	0.57			1.00	1.00		1.00	
Incremental Delay, d2	14.8	1.8		21.1	0.9			117.2	0.1		762.3	
Delay (s)	23.6	10.8		30.0	5.6			151.2	26.1		796.3	
Level of Service	С	В		С	Α			F	С		F	
Approach Delay (s)		12.0			7.9			132.1			796.3	
Approach LOS		В			Α			F			F	
Intersection Summary												
HCM 2000 Control Delay			110.0	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capac	ity ratio		1.26									
Actuated Cycle Length (s)			90.0		um of lost				8.0			
Intersection Capacity Utilizat	ion		108.6%	IC	U Level of	of Service	!		G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> β		7	ħβ		ň	<b>^</b>	7	Ţ	<b>∱</b> β	_
Volume (vph)	405	1379	121	243	1020	166	131	834	184	167	807	124
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2981		1509	2954		1509	3018	1350	1509	2957	
Flt Permitted	0.09	1.00		0.09	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	151	2981		138	2954		266	3018	1350	260	2957	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	426	1452	127	256	1074	175	138	878	194	176	849	131
RTOR Reduction (vph)	0	6	0	0	13	0	0	0	80	0	12	0
Lane Group Flow (vph)	426	1573	0	256	1236	0	138	878	115	176	968	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		31.9	24.9	24.9	31.4	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		29.9	25.0	25.0	30.4	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	160	1401		154	1388		154	754	337	153	739	
v/s Ratio Prot	c0.16	0.53		0.10	0.42		0.05	0.29		c0.07	c0.33	
v/s Ratio Perm	c1.23			0.76			0.21		0.08	0.28		
v/c Ratio	2.66	1.12		1.66	0.89		0.90	1.16	0.34	1.15	1.31	
Uniform Delay, d1	20.7	26.5		25.0	24.2		31.5	37.5	30.7	33.0	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.90	0.53	
Incremental Delay, d2	765.7	65.1		325.0	8.9		49.1	88.2	2.7	115.3	148.2	
Delay (s)	786.4	91.6		350.0	33.1		80.6	125.7	33.5	145.0	168.1	
Level of Service	F	F		F	С		F	F	С	F	F	
Approach Delay (s)		239.2			87.0			105.8			164.6	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			158.1	Н	CM 2000	Level of	Service		F			
HCM 2000 Volume to Capa	city ratio		2.12									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ition		118.2%	IC	CU Level	of Service	)		Н			
Analysis Period (min)			15									
c Critical Lane Group												

	ၨ	<b>→</b>	<b>←</b>	•	<b>\</b>	4		
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	*	<b>^</b>	<b>∱</b> ∱		¥	-		
Volume (vph)	103	1706	1367	33	23	47		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95	0.95		1.00			
Frt	1.00	1.00	1.00		0.91			
Flt Protected	0.95	1.00	1.00		0.98			
Satd. Flow (prot)	1509	3018	3007		1421			
Flt Permitted	0.14	1.00	1.00		0.98			
Satd. Flow (perm)	223	3018	3007		1421			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	112	1854	1486	36	25	51		
RTOR Reduction (vph)	0	0	1	0	44	0		
Lane Group Flow (vph)	112	1854	1521	0	32	0	ļ	
Turn Type	Perm	NA	NA		Prot			
Protected Phases		2	6		4			
Permitted Phases	2							
Actuated Green, G (s)	80.0	80.0	80.0		13.5			
Effective Green, g (s)	79.5	79.5	79.5		14.0			
Actuated g/C Ratio	0.78	0.78	0.78		0.14			
Clearance Time (s)	3.5	3.5	3.5		4.5			
Vehicle Extension (s)	0.2	0.2	0.2		3.0			
Lane Grp Cap (vph)	174	2363	2355		196			
v/s Ratio Prot		c0.61	0.51		c0.02			
v/s Ratio Perm	0.50							
v/c Ratio	0.64	0.78	0.65		0.16			
Uniform Delay, d1	4.8	6.2	4.8		38.6			
Progression Factor	0.22	0.21	1.00		1.00			
Incremental Delay, d2	10.3	1.6	1.4		0.4			
Delay (s)	11.3	2.9	6.2		39.0			
Level of Service	В	Α	Α		D			
Approach Delay (s)		3.4	6.2		39.0			
Approach LOS		Α	Α		D			
Intersection Summary								
HCM 2000 Control Delay			5.3	H	CM 2000	Level of Service		
HCM 2000 Volume to Capac	city ratio		0.69					
Actuated Cycle Length (s)			101.5		um of lost			
Intersection Capacity Utilizat	ion		79.7%	IC	U Level o	of Service		
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<i>&gt;</i>	<b>/</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> }			<b>€</b> 1}						4	
Volume (vph)	76	1710	4	8	1366	93	0	0	0	40	5	58
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			0.99						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3017			2988						1439	
Flt Permitted	0.13	1.00			0.94						0.98	
Satd. Flow (perm)	203	3017			2814						1439	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	83	1859	4	8	1485	101	0	0	0	43	5	63
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	51	0
Lane Group Flow (vph)	83	1863	0	0	1590	0	0	0	0	0	60	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	78.5	78.5			78.5						13.0	
Effective Green, g (s)	78.5	78.5			78.5						13.0	
Actuated g/C Ratio	0.78	0.78			0.78						0.13	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	159	2368			2208						187	
v/s Ratio Prot		c0.62									c0.04	
v/s Ratio Perm	0.41				0.57							
v/c Ratio	0.52	0.79			0.72						0.32	
Uniform Delay, d1	3.9	6.0			5.3						39.5	
Progression Factor	0.22	0.21			0.70						1.00	
Incremental Delay, d2	7.3	1.7			1.5						1.0	
Delay (s)	8.1	2.9			5.2						40.5	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		3.2			5.2			0.0			40.5	
Approach LOS		Α			Α			Α			D	
Intersection Summary												
HCM 2000 Control Delay			5.2	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.72									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizati	ion		88.2%	IC	CU Level of	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	<b>∱</b> }		¥	<b>↑</b> ↑		, N	ĵ»		7	f)	
Volume (vph)	28	1702	83	68	1328	18	73	280	50	24	219	80
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2997		1509	3012		1509	1552		1509	1525	
Flt Permitted	0.13	1.00		0.06	1.00		0.31	1.00		0.26	1.00	
Satd. Flow (perm)	209	2997		96	3012		495	1552		411	1525	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	29	1792	87	72	1398	19	77	295	53	25	231	84
RTOR Reduction (vph)	0	3	0	0	1	0	0	7	0	0	14	0
Lane Group Flow (vph)	29	1876	0	72	1416	0	77	341	0	25	301	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	66.1	66.1		66.1	66.1		25.9	25.9		25.9	25.9	
Effective Green, g (s)	66.1	66.1		66.1	66.1		25.9	25.9		25.9	25.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	138	1981		63	1990		128	401		106	394	
v/s Ratio Prot		0.63			0.47			c0.22			0.20	
v/s Ratio Perm	0.14			c0.75			0.16			0.06		
v/c Ratio	0.21	0.95		1.14	0.71		0.60	0.85		0.24	0.76	
Uniform Delay, d1	6.7	15.4		17.0	10.9		32.5	35.2		29.2	34.2	
Progression Factor	1.31	0.90		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	7.5		157.6	2.2		7.7	15.8		1.1	8.5	
Delay (s)	10.9	21.4		174.5	13.0		40.3	51.0		30.4	42.8	
Level of Service	В	С		F	В		D	D		С	D	
Approach Delay (s)		21.2			20.9			49.1			41.8	
Approach LOS		С			С			D			D	
Intersection Summary												
HCM 2000 Control Delay			25.6	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	ity ratio		1.05									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		100.5%	IC	CU Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	<b>↑</b> 1≽		ሻ	<b>∱</b> 1≽	•
Volume (vph)	51	331	33	60	142	60	32	1175	203	71	1055	44
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.97		1.00	0.98		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1561			1522		1509	2951		1509	3000	
Flt Permitted		0.93			0.87		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1466			1337		397	2951		397	3000	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	348	35	63	149	63	34	1237	214	75	1111	46
RTOR Reduction (vph)	0	8	0	0	10	0	0	35	0	0	7	0
Lane Group Flow (vph)	0	429	0	0	265	0	34	1416	0	75	1150	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		586			534		158	1180		158	1200	
v/s Ratio Prot								c0.48			0.38	
v/s Ratio Perm		c0.29			0.20		0.09			0.19		
v/c Ratio		0.73			0.50		0.22	1.20		0.47	0.96	
Uniform Delay, d1		10.2			9.0		7.9	12.0		8.9	11.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		7.9			3.3		3.1	98.4		9.9	17.7	
Delay (s)		18.1			12.3		11.0	110.4		18.8	29.4	
Level of Service		В			В		В	F		В	С	
Approach Delay (s)		18.1			12.3			108.2			28.7	
Approach LOS		В			В			F			С	
Intersection Summary												
HCM 2000 Control Delay			60.5	Н	CM 2000	Level of S	Service		Е			
HCM 2000 Volume to Capacity	y ratio		0.97									
Actuated Cycle Length (s)			40.0	S	um of lost	t time (s)			8.0			
Intersection Capacity Utilizatio	n		90.3%			of Service			Е			
Analysis Period (min)			15									

Analysis Period (min)
c Critical Lane Group

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Movement EBL EBT WBT	WBR	SBL	SBR	
Lane Configurations 4† †		¥		
Volume (vph) 54 1391 1175	45	37	30	
Ideal Flow (vphpl) 1620 1620 1620	1620	1620	1620	
Total Lost time (s) 4.0 4.0		4.0		
Lane Util. Factor 0.95 0.95		1.00		
Frt 1.00 0.99		0.94		
Flt Protected 1.00 1.00		0.97		
Satd. Flow (prot) 3012 3001		1452		
Flt Permitted 0.82 1.00		0.97		
Satd. Flow (perm) 2480 3001		1452		
Peak-hour factor, PHF 0.92 0.92 0.92	0.92	0.92	0.92	
Adj. Flow (vph) 59 1512 1277	49	40	33	
RTOR Reduction (vph) 0 0 2	0	28	0	
Lane Group Flow (vph) 0 1571 1324	0	45	0	
Turn Type Perm NA NA		Prot		
Protected Phases 2 2		4		
Permitted Phases 2				
Actuated Green, G (s) 66.9 66.9		12.5		
Effective Green, g (s) 69.5 69.5		12.5		
Actuated g/C Ratio 0.77 0.77		0.14		
Clearance Time (s) 6.6 6.6		4.0		
Vehicle Extension (s) 5.0 5.0		3.0		
Lane Grp Cap (vph) 1915 2317		201		
v/s Ratio Prot 0.44		c0.03		
v/s Ratio Perm c0.63				
v/c Ratio 0.82 0.57		0.22		
Uniform Delay, d1 6.4 4.2		34.4		
Progression Factor 1.00 0.33		1.00		
Incremental Delay, d2 4.1 0.9		0.6		
Delay (s) 10.5 2.3		35.0		
Level of Service B A		С		
Approach Delay (s) 10.5 2.3		35.0		
Approach LOS B A		С		
Intersection Summary				
HCM 2000 Control Delay 7.4	HCI	M 2000 L	evel of Service	Α
HCM 2000 Volume to Capacity ratio 0.73				
Actuated Cycle Length (s) 90.0		n of lost t		8.0
Intersection Capacity Utilization 105.0%	ICU	Level of	Service	G
Analysis Period (min) 15				
c Critical Lane Group				

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }	20.1	ሻ	<b>^</b>	¥	71511		
Volume (vph)	1735	23	36	1357	46	75		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3012		1509	3018	1428			
Flt Permitted	1.00		0.08	1.00	0.98			
Satd. Flow (perm)	3012		127	3018	1428			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1886	25	39	1475	50	82		
RTOR Reduction (vph)	1	0	0	0	24	0		
Lane Group Flow (vph)	1910	0	39	1475	108	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	4			
Permitted Phases	_		6		•			
Actuated Green, G (s)	80.0		80.0	80.0	13.5			
Effective Green, g (s)	79.5		79.5	79.5	14.0			
Actuated g/C Ratio	0.78		0.78	0.78	0.14			
Clearance Time (s)	3.5		3.5	3.5	4.5			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2359		99	2363	196			
v/s Ratio Prot	c0.63			0.49	c0.08			
v/s Ratio Perm			0.31					
v/c Ratio	0.81		0.39	0.62	0.55			
Uniform Delay, d1	6.5		3.4	4.7	40.8			
Progression Factor	1.00		0.27	0.17	1.00			
Incremental Delay, d2	3.1		8.9	1.0	3.3			
Delay (s)	9.7		9.8	1.8	44.1			
Level of Service	А		Α	А	D			
Approach Delay (s)	9.7			2.0	44.1			
Approach LOS	А			А	D			
Intersection Summary								
HCM 2000 Control Delay			7.7	Н	CM 2000	Level of Service	 А	
HCM 2000 Volume to Capa	acity ratio		0.77					
Actuated Cycle Length (s)	_		101.5	S	um of lost	time (s)	8.0	
Intersection Capacity Utiliza	ation		72.2%			of Service	С	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> 1>	20.1	ሻ	<b>^</b>	W			
Volume (vph)	1701	27	51	1387	61	76		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3011		1509	3018	1437			
Flt Permitted	1.00		0.08	1.00	0.98			
Satd. Flow (perm)	3011		134	3018	1437			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1849	29	55	1508	66	83		
RTOR Reduction (vph)	1	0	0	0	29	0		
Lane Group Flow (vph)	1877	0	55	1508	120	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	8			
Permitted Phases	<del>-</del>		6	-	_			
Actuated Green, G (s)	78.5		78.5	78.5	13.5			
Effective Green, g (s)	78.5		78.5	78.5	13.5			
Actuated g/C Ratio	0.78		0.78	0.78	0.14			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2363		105	2369	193			
v/s Ratio Prot	c0.62			0.50	c0.08			
v/s Ratio Perm			0.41					
v/c Ratio	0.79		0.52	0.64	0.62			
Uniform Delay, d1	6.1		3.9	4.6	40.9			
Progression Factor	1.00		0.17	0.13	1.00			
Incremental Delay, d2	2.9		12.5	0.9	6.2			
Delay (s)	9.0		13.2	1.5	47.0			
Level of Service	Α		В	А	D			
Approach Delay (s)	9.0			1.9	47.0			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			7.5	Н	CM 2000	Level of Service	 А	
HCM 2000 Volume to Capa	acity ratio		0.77					
Actuated Cycle Length (s)	_		100.0	S	um of lost	time (s)	8.5	
Intersection Capacity Utiliza	ation		72.3%		CU Level o		С	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		4₽	ħβ		W		
Volume (veh/h)	17	1756	1394	42	4	26	
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	18	1909	1515	46	4	28	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		None	None				
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	1561				2529	780	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1561				2529	780	
tC, single (s)	4.1				6.8	6.9	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	96				80	92	
cM capacity (veh/h)	420				22	338	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1		
Volume Total	655	1272	1010	551	33		
Volume Left	18	0	0	0	4		
Volume Right	0	0	0	46	28		
cSH	420	1700	1700	1700	114		
Volume to Capacity	0.04	0.75	0.59	0.32	0.28		
Queue Length 95th (ft)	3	0	0	0	27		
Control Delay (s)	1.4	0.0	0.0	0.0	48.5		
Lane LOS	A				E		
Approach Delay (s)	0.5		0.0		48.5		
Approach LOS					Е		
Intersection Summary							
Average Delay			0.7				
Intersection Capacity Utiliz	ation		80.9%	IC	U Level o	of Service	
Analysis Period (min)			15				
J							

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	, T	<b>∱</b> }		¥	<b>∱</b> }		¥	<b>♦</b> ₽		J.	<b>↑</b> ↑	
Volume (vph)	113	672	160	259	1190	61	137	781	50	60	920	355
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2931		1509	2996		1509	2990		1509	2891	
Flt Permitted	0.12	1.00		0.26	1.00		0.11	1.00		0.16	1.00	
Satd. Flow (perm)	192	2931		413	2996		176	2990		258	2891	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	707	168	273	1253	64	144	822	53	63	968	374
RTOR Reduction (vph)	0	13	0	0	4	0	0	4	0	0	35	0
Lane Group Flow (vph)	119	862	0	273	1313	0	144	871	0	63	1307	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	107	1641		231	1677		63	1076		92	1040	
v/s Ratio Prot		0.29			0.44			0.29			0.45	
v/s Ratio Perm	0.62			c0.66			c0.82			0.24		
v/c Ratio	1.11	0.53		1.18	0.78		2.29	0.81		0.68	1.26	
Uniform Delay, d1	22.0	13.7		22.0	17.2		32.0	28.9		27.2	32.0	
Progression Factor	1.00	1.00		1.00	1.00		0.98	0.96		1.00	1.00	
Incremental Delay, d2	120.4	1.2		117.2	3.7		625.2	6.5		34.2	123.6	
Delay (s)	142.4	14.9		139.2	21.0		656.5	34.4		61.4	155.6	
Level of Service	F	В		F	С		F	С		E	F	
Approach Delay (s)		30.2			41.3			122.3			151.4	
Approach LOS		С			D			F			F	
Intersection Summary												
HCM 2000 Control Delay			86.5	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capa	city ratio		1.61									
Actuated Cycle Length (s)			100.0		um of lost	٠,			8.0			
Intersection Capacity Utiliza	tion		114.6%	IC	CU Level	of Service			Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> ↑			414	W			
Volume (vph)	873	20	29	1434	29	14		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	1020	1020	4.0	4.0	1020		
Lane Util. Factor	0.95			0.95	1.00			
Frt	1.00			1.00	0.96			
Flt Protected	1.00			1.00	0.97			
Satd. Flow (prot)	3008			3015	1469			
Flt Permitted	1.00			0.92	0.97			
Satd. Flow (perm)	3008			2771	1469			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	919	21	31	1509	31	15		
RTOR Reduction (vph)	1	0	0	0	13	0		
Lane Group Flow (vph)	939	0	0	1540	33	0		
Turn Type	NA		Perm	NA	Prot	-		
Protected Phases	2		1 01111	2	4			
Permitted Phases			2	_	•			
Actuated Green, G (s)	70.2			70.2	9.2			
Effective Green, g (s)	72.8			72.8	9.2			
Actuated g/C Ratio	0.81			0.81	0.10			
Clearance Time (s)	6.6			6.6	4.0			
Vehicle Extension (s)	5.0			5.0	3.0			
Lane Grp Cap (vph)	2433			2241	150			
v/s Ratio Prot	0.31				c0.02			
v/s Ratio Perm	0,0,			c0.56	00.02			
v/c Ratio	0.39			0.69	0.22			
Uniform Delay, d1	2.4			3.7	37.1			
Progression Factor	0.23			1.00	1.00			
Incremental Delay, d2	0.4			1.7	0.7			
Delay (s)	1.0			5.4	37.8			
Level of Service	A			Α	D			
Approach Delay (s)	1.0			5.4	37.8			
Approach LOS	А			А	D			
Intersection Summary								
HCM 2000 Control Delay			4.4	H	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capa	acity ratio		0.63				· ·	
Actuated Cycle Length (s)			90.0	Sı	um of lost	time (s)	8.0	
Intersection Capacity Utiliz	ation		85.7%		U Level o		E	
Analysis Period (min)			15	,,,				
c Critical Lane Group								

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	<b>∱</b> β		Ť	ħβ			र्स	7		4	
Volume (vph)	50	797	36	92	1222	39	30	170	65	73	257	98
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	2998		1509	3004			1576	1350		1526	
Flt Permitted	0.15	1.00		0.29	1.00			0.79	1.00		0.77	
Satd. Flow (perm)	246	2998		460	3004			1254	1350		1189	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	839	38	97	1286	41	32	179	68	77	271	103
RTOR Reduction (vph)	0	4	0	0	2	0	0	0	51	0	12	0
Lane Group Flow (vph)	53	873	0	97	1325	0	0	211	17	0	439	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	164	1998		306	2002			306	330		290	
v/s Ratio Prot		0.29			c0.44							
v/s Ratio Perm	0.22			0.21				0.17	0.01		c0.37	
v/c Ratio	0.32	0.44		0.32	0.66			0.69	0.05		1.51	
Uniform Delay, d1	6.4	7.1		6.3	8.9			30.9	26.0		34.0	
Progression Factor	1.00	1.00		0.44	0.50			1.00	1.00		1.00	
Incremental Delay, d2	5.2	0.7		1.9	1.2			6.3	0.1		248.1	
Delay (s)	11.5	7.8		4.7	5.7			37.2	26.1		282.1	
Level of Service	В	Α		Α	Α			D	С		F	
Approach Delay (s)		8.0			5.6			34.5			282.1	
Approach LOS		Α			Α			С			F	
Intersection Summary												
HCM 2000 Control Delay			49.4	Н	CM 2000	Level of S	Service		D			
HCM 2000 Volume to Capac	ity ratio		0.89									
Actuated Cycle Length (s)			90.0	S	um of lost	time (s)			8.0			
Intersection Capacity Utilizati	ion	•	102.8%	IC	CU Level o	of Service	)		G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ħβ		ሻ	ħβ		*	<b>^</b>	7	ሻ	<b>∱</b> ∱	
Volume (vph)	184	911	106	391	1238	118	156	714	129	122	830	107
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2970		1509	2978		1509	3018	1350	1509	2966	
Flt Permitted	0.09	1.00		0.15	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	138	2970		238	2978		266	3018	1350	260	2966	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	194	959	112	412	1303	124	164	752	136	128	874	113
RTOR Reduction (vph)	0	9	0	0	7	0	0	0	65	0	10	0
Lane Group Flow (vph)	194	1062	0	412	1420	0	164	752	72	128	977	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		31.9	24.9	24.9	31.4	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		29.9	25.0	25.0	30.4	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	154	1395		200	1399		154	754	337	153	741	
v/s Ratio Prot	0.08	0.36		c0.12	0.48		c0.06	0.25		0.05	c0.33	
v/s Ratio Perm	0.58			c0.95			0.25		0.05	0.20		
v/c Ratio	1.26	0.76		2.06	1.02		1.06	1.00	0.21	0.84	1.32	
Uniform Delay, d1	23.5	21.9		20.7	26.5		33.4	37.5	29.7	29.2	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.76	0.64	
Incremental Delay, d2	158.6	4.0		493.9	27.9		90.9	32.1	1.4	27.4	152.0	
Delay (s)	182.1	25.8		514.6	54.4		124.2	69.6	31.1	49.6	176.0	
Level of Service	F	С		F	D		F	E	С	D	F	
Approach Delay (s)		49.8			157.5			73.1			161.5	
Approach LOS		D			F			E			F	
Intersection Summary												
HCM 2000 Control Delay			115.7	Н	CM 2000	Level of	Service		F			
HCM 2000 Volume to Capa	city ratio		1.74									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ition		113.3%	IC	CU Level	of Service	9		Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	ሻ	<b>^</b>	ħβ		W		
Volume (vph)	17	1212	1602	23	26	107	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)	4.0	4.0	4.0		4.0		
Lane Util. Factor	1.00	0.95	0.95		1.00		
Frt	1.00	1.00	1.00		0.89		
Flt Protected	0.95	1.00	1.00		0.99		
Satd. Flow (prot)	1509	3018	3011		1402		
Flt Permitted	0.10	1.00	1.00		0.99		
Satd. Flow (perm)	158	3018	3011		1402		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	18	1317	1741	25	28	116	
RTOR Reduction (vph)	0	0	1	0	33	0	
Lane Group Flow (vph)	18	1317	1765	0	111	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	6		4		
Permitted Phases	2						
Actuated Green, G (s)	79.8	79.8	79.8		13.7		
Effective Green, g (s)	79.3	79.3	79.3		14.2		
Actuated g/C Ratio	0.78	0.78	0.78		0.14		
Clearance Time (s)	3.5	3.5	3.5		4.5		
Vehicle Extension (s)	0.2	0.2	0.2		3.0		
Lane Grp Cap (vph)	123	2357	2352		196		
v/s Ratio Prot		0.44	c0.59		c0.08		
v/s Ratio Perm	0.11						
v/c Ratio	0.15	0.56	0.75		0.57		
Uniform Delay, d1	2.7	4.3	5.9		40.8		
Progression Factor	0.25	0.19	1.00		1.00		
Incremental Delay, d2	2.1	8.0	2.3		3.7		
Delay (s)	2.8	1.6	8.1		44.5		
Level of Service	Α	Α	Α		D		
Approach Delay (s)		1.7	8.1		44.5		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			7.1	H	CM 2000	Level of Service	
HCM 2000 Volume to Capac	city ratio		0.72				
Actuated Cycle Length (s)			101.5		um of lost		
Intersection Capacity Utilizat	ion		68.9%	IC	U Level o	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> 1≽			4T>						4	
Volume (vph)	31	1162	23	4	1625	25	0	0	0	53	8	73
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			1.00						0.93	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3009			3011						1443	
Flt Permitted	0.10	1.00			0.95						0.98	
Satd. Flow (perm)	153	3009			2869						1443	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	34	1263	24	4	1766	27	0	0	0	58	8	79
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	0	0	34	0
Lane Group Flow (vph)	34	1286	0	0	1796	0	0	0	0	0	111	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	78.7	78.7			78.7						12.8	
Effective Green, g (s)	78.7	78.7			78.7						12.8	
Actuated g/C Ratio	0.79	0.79			0.79						0.13	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	120	2368			2257						184	
v/s Ratio Prot		0.43									c0.08	
v/s Ratio Perm	0.22				c0.63							
v/c Ratio	0.28	0.54			0.80						0.60	
Uniform Delay, d1	2.9	4.0			6.1						41.2	
Progression Factor	0.18	0.18			0.56						1.00	
Incremental Delay, d2	4.9	8.0			2.0						5.5	
Delay (s)	5.5	1.5			5.4						46.7	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		1.6			5.4			0.0			46.7	
Approach LOS		Α			Α			Α			D	
Intersection Summary												
HCM 2000 Control Delay			5.7	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.77									
Actuated Cycle Length (s)			100.0		um of lost				8.5			
Intersection Capacity Utilizat	ion		73.2%	IC	:U Level o	of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	, j	<b>∱</b> }		*	<b>↑</b> ↑		J.	f)		¥	ĵ»	
Volume (vph)	81	1153	61	54	1495	64	56	108	27	85	192	94
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2995		1509	2999		1509	1541		1509	1510	
Flt Permitted	0.10	1.00		0.17	1.00		0.29	1.00		0.59	1.00	
Satd. Flow (perm)	152	2995		271	2999		468	1541		942	1510	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	85	1214	64	57	1574	67	59	114	28	89	202	99
RTOR Reduction (vph)	0	3	0	0	3	0	0	10	0	0	19	0
Lane Group Flow (vph)	85	1275	0	57	1638	0	59	132	0	89	282	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.7	68.7		68.7	68.7		23.3	23.3		23.3	23.3	
Effective Green, g (s)	68.7	68.7		68.7	68.7		23.3	23.3		23.3	23.3	
Actuated g/C Ratio	0.69	0.69		0.69	0.69		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	104	2057		186	2060		109	359		219	351	
v/s Ratio Prot		0.43			0.55			0.09			c0.19	
v/s Ratio Perm	c0.56			0.21			0.13			0.09		
v/c Ratio	0.82	0.62		0.31	0.80		0.54	0.37		0.41	0.80	
Uniform Delay, d1	11.2	8.5		6.2	10.8		33.7	32.2		32.5	36.2	
Progression Factor	0.82	0.79		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	43.7	1.2		4.2	3.3		5.4	0.6		1.2	12.5	
Delay (s)	52.8	8.0		10.4	14.1		39.1	32.8		33.7	48.6	
Level of Service	D	Α		В	В		D	С		С	D	
Approach Delay (s)		10.7			14.0			34.6			45.2	
Approach LOS		В			В			С			D	
Intersection Summary												
HCM 2000 Control Delay			17.2	H	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capac	city ratio		0.81									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utiliza	tion		103.1%	IC	U Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	<b>ተ</b> ኈ		7	<b>∱</b> ⊅	
Volume (vph)	64	106	32	156	284	42	70	897	24	32	1304	56
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.98			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1530			1545		1509	3006		1509	2999	
Flt Permitted		0.81			0.84		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1264			1318		397	3006		397	2999	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	112	34	164	299	44	74	944	25	34	1373	59
RTOR Reduction (vph)	0	6	0	0	8	0	0	5	0	0	8	0
Lane Group Flow (vph)	0	207	0	0	499	0	74	964	0	34	1424	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		505			527		158	1202		158	1199	
v/s Ratio Prot								0.32			c0.47	
v/s Ratio Perm		0.16			c0.38		0.19			0.09		
v/c Ratio		0.41			0.95		0.47	0.80		0.22	1.19	
Uniform Delay, d1		8.6			11.6		8.9	10.6		7.9	12.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			26.1		9.6	5.7		3.1	93.1	
Delay (s)		9.2			37.7		18.5	16.3		11.0	105.1	
Level of Service		Α			D		В	В		В	F	
Approach Delay (s)		9.2			37.7			16.5			103.0	
Approach LOS		А			D			В			F	
Intersection Summary												
HCM 2000 Control Delay			58.6	Н	CM 2000	Level of S	Service		E			
HCM 2000 Volume to Capacit	y ratio		1.07									
Actuated Cycle Length (s)			40.0		um of lost				8.0			
Intersection Capacity Utilization	n		99.6%	IC	CU Level of	of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	ħβ		¥	-	
Volume (vph)	15	861	1432	11	26	58	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	1.00		0.91		
Flt Protected		1.00	1.00		0.98		
Satd. Flow (prot)		3015	3014		1418		
Flt Permitted		0.91	1.00		0.98		
Satd. Flow (perm)		2749	3014		1418		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	16	936	1557	12	28	63	
RTOR Reduction (vph)	0	0	0	0	51	0	
Lane Group Flow (vph)	0	952	1569	0	40	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		70.2	70.2		9.2		
Effective Green, g (s)		72.8	72.8		9.2		
Actuated g/C Ratio		0.81	0.81		0.10		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		2223	2437	_	144		
v/s Ratio Prot			c0.52		c0.03		
v/s Ratio Perm		0.35					
v/c Ratio		0.43	0.64		0.28		
Uniform Delay, d1		2.5	3.4		37.3		
Progression Factor		1.00	0.16		1.00		
Incremental Delay, d2		0.6	1.0		1.0		
Delay (s)		3.1	1.6		38.4		
Level of Service		Α	Α		D		
Approach Delay (s)		3.1	1.6		38.4		
Approach LOS		Α	Α		D		
Intersection Summary							
HCM 2000 Control Delay			3.4	Н	CM 2000	Level of Service	
HCM 2000 Volume to Capac	ity ratio		0.60				
Actuated Cycle Length (s)			90.0		um of lost		
Intersection Capacity Utilizat	ion		61.8%	IC	U Level c	of Service	
Analysis Period (min)			15				
c Critical Lane Group							

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> ↑	20.1	ሻ	<b>^</b>	W			
Volume (vph)	1174	9	64	1603	24	36		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3014		1509	3018	1431			
Flt Permitted	1.00		0.19	1.00	0.98			
Satd. Flow (perm)	3014		301	3018	1431			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1276	10	70	1742	26	39		
RTOR Reduction (vph)	0	0	0	0	34	0		
Lane Group Flow (vph)	1286	0	70	1742	31	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	4			
Permitted Phases	<del>-</del>		6	_	•			
Actuated Green, G (s)	79.8		79.8	79.8	13.7			
Effective Green, g (s)	79.3		79.3	79.3	14.2			
Actuated g/C Ratio	0.78		0.78	0.78	0.14			
Clearance Time (s)	3.5		3.5	3.5	4.5			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2354		235	2357	200			
v/s Ratio Prot	0.43			c0.58	c0.02			
v/s Ratio Perm			0.23					
v/c Ratio	0.55		0.30	0.74	0.16			
Uniform Delay, d1	4.2		3.2	5.7	38.4			
Progression Factor	1.00		0.29	0.24	1.00			
Incremental Delay, d2	0.9		2.1	1.4	0.4			
Delay (s)	5.2		3.1	2.8	38.8			
Level of Service	А		Α	Α	D			
Approach Delay (s)	5.2			2.8	38.8			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			4.5	Н	CM 2000	Level of Service	А	
HCM 2000 Volume to Capa	city ratio		0.65					
Actuated Cycle Length (s)	_		101.5	S	um of lost	time (s)	8.0	
Intersection Capacity Utiliza	ation		72.6%		CU Level o		С	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations	<b>†</b> 1>	20.1	*	<b>^</b>	¥	71311			
Volume (vph)	1189	20	77	1622	46	38			
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620			
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020			
Lane Util. Factor	0.95		1.00	0.95	1.00				
Frt	1.00		1.00	1.00	0.94				
Flt Protected	1.00		0.95	1.00	0.97				
Satd. Flow (prot)	3010		1509	3018	1452				
Flt Permitted	1.00		0.18	1.00	0.97				
Satd. Flow (perm)	3010		293	3018	1452				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	1292	22	84	1763	50	41			
RTOR Reduction (vph)	1	0	0	0	32	0			
Lane Group Flow (vph)	1313	0	84	1763	59	0			
Turn Type	NA		Perm	NA	Prot				
Protected Phases	2			6	8				
Permitted Phases	_		6		· ·				
Actuated Green, G (s)	78.7		78.7	78.7	13.3				
Effective Green, g (s)	78.7		78.7	78.7	13.3				
Actuated g/C Ratio	0.79		0.79	0.79	0.13				
Clearance Time (s)	4.0		4.0	4.0	4.0				
Vehicle Extension (s)	0.2		0.2	0.2	3.0				
Lane Grp Cap (vph)	2368		230	2375	193				
v/s Ratio Prot	0.44			c0.58	c0.04				
v/s Ratio Perm			0.29						
v/c Ratio	0.55		0.37	0.74	0.31				
Uniform Delay, d1	4.0		3.2	5.5	39.2				
Progression Factor	1.00		0.21	0.17	1.00				
Incremental Delay, d2	0.9		2.7	1.3	0.9				
Delay (s)	5.0		3.4	2.2	40.1				
Level of Service	А		Α	А	D				
Approach Delay (s)	5.0			2.3	40.1				
Approach LOS	А			А	D				
Intersection Summary									
HCM 2000 Control Delay			4.4	Н	CM 2000	Level of Service	<u></u>	А	
HCM 2000 Volume to Capa	acity ratio		0.68						
Actuated Cycle Length (s)			100.0		um of lost			8.5	
Intersection Capacity Utiliza	ation		71.7%	IC	CU Level o	of Service		С	
Analysis Period (min)			15						
c Critical Lane Group									

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41₽	<b>↑</b> ↑		¥	
Volume (veh/h)	1	1219	1642	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	1325	1785	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1785				2449	892
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1785				2449	892
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	343				26	285
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	443	883	1190	595	0	
Volume Left	1	0	0	0	0	
Volume Right	0	0	0	0	0	
cSH	343	1700	1700	1700	1700	
Volume to Capacity	0.00	0.52	0.70	0.35	0.00	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	0.1	0.0	0.0	0.0	0.0	
Lane LOS	А				Α	
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS					А	
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utiliz	ation		56.6%	IC	:U Level d	of Service
Analysis Period (min)			15			,
aryolo i onou (iiiii)			10			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ∱		ሻ	<b>∱</b> ∱		ሻ	<b>∱</b> ⊅		ሻ	<b>∱</b> ∱	
Volume (vph)	242	1221	129	122	960	105	127	1174	174	56	900	155
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2974		1509	2973		1509	2959		1509	2951	
Flt Permitted	0.17	1.00		0.10	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	277	2974		153	2973		176	2959		176	2951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	255	1285	136	128	1011	111	134	1236	183	59	947	163
RTOR Reduction (vph)	0	8	0	0	4	0	0	12	0	0	14	0
Lane Group Flow (vph)	255	1413	0	128	1118	0	134	1407	0	59	1096	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	155	1665		85	1664		63	1065		63	1062	
v/s Ratio Prot		0.48			0.38			0.48			0.37	
v/s Ratio Perm	c0.92			0.84			c0.76			0.33		
v/c Ratio	1.65	0.85		1.51	0.67		2.13	1.32		0.94	1.03	
Uniform Delay, d1	22.0	18.4		22.0	15.5		32.0	32.0		30.9	32.0	
Progression Factor	1.00	1.00		1.00	1.00		0.96	0.95		1.00	1.00	
Incremental Delay, d2	317.4	5.6		279.1	2.2		556.2	151.3		96.4	36.1	
Delay (s)	339.4	24.1		301.1	17.7		586.7	181.7		127.3	68.1	
Level of Service	F	С		F	В		F	F		F	Ε	
Approach Delay (s)		72.0			46.7			216.7			71.1	
Approach LOS		Е			D			F			E	
Intersection Summary												
HCM 2000 Control Delay			106.0	Н	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capac	city ratio		1.83									
Actuated Cycle Length (s)	-		100.0	Sı	um of lost	time (s)			8.0			
Intersection Capacity Utilizat	tion		119.0%		CU Level o		:		Н			
Analysis Period (min)			15									
c Critical Lane Group												

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> Ъ	2511		414	W			
Volume (vph)	1395	33	19	1125	82	37		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	.020	4.0	4.0	. 525		
Lane Util. Factor	0.95			0.95	1.00			
Frt	1.00			1.00	0.96			
Flt Protected	1.00			1.00	0.97			
Satd. Flow (prot)	3007			3015	1471			
Flt Permitted	1.00			0.91	0.97			
Satd. Flow (perm)	3007			2741	1471			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95		
Adj. Flow (vph)	1468	35	20	1184	86	39		
RTOR Reduction (vph)	1	0	0	0	20	0		
Lane Group Flow (vph)	1502	0	0	1204	105	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			2	4			
Permitted Phases			2					
Actuated Green, G (s)	66.9			66.9	12.5			
Effective Green, g (s)	69.5			69.5	12.5			
Actuated g/C Ratio	0.77			0.77	0.14			
Clearance Time (s)	6.6			6.6	4.0			
Vehicle Extension (s)	5.0			5.0	3.0			
Lane Grp Cap (vph)	2322			2116	204			
v/s Ratio Prot	c0.50				c0.07			
v/s Ratio Perm				0.44				
v/c Ratio	0.65			0.57	0.52			
Uniform Delay, d1	4.7			4.2	35.9			
Progression Factor	0.18			1.00	1.00			
Incremental Delay, d2	0.8			1.1	2.2			
Delay (s)	1.6			5.3	38.1			
Level of Service	Α			Α	D			
Approach Delay (s)	1.6			5.3	38.1			
Approach LOS	А			А	D			
Intersection Summary								
HCM 2000 Control Delay			4.8	H	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capac	ity ratio		0.63					
Actuated Cycle Length (s)			90.0	Sı	um of lost	time (s)	8.0	
Intersection Capacity Utilizati	ion		67.3%	IC	U Level o	f Service	С	
Analysis Period (min)			15					
c Critical Lane Group								

	۶	<b>→</b>	•	•	<b>←</b>	•	4	<b>†</b>	<b>/</b>	<b>/</b>	Ţ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> }		ň	<b>∱</b> }			ર્ન	7		4	
Volume (vph)	125	1229	44	117	1024	96	54	294	62	82	227	63
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1509	3002		1509	2979			1576	1350		1535	
Flt Permitted	0.19	1.00		0.15	1.00			0.79	1.00		0.38	
Satd. Flow (perm)	306	3002		241	2979			1247	1350		594	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	132	1294	46	123	1078	101	57	309	65	86	239	66
RTOR Reduction (vph)	0	3	0	0	8	0	0	0	49	0	8	0
Lane Group Flow (vph)	132	1337	0	123	1171	0	0	366	16	0	383	0
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Actuated Green, G (s)	59.5	59.5		59.5	59.5			21.5	21.5		21.5	
Effective Green, g (s)	60.0	60.0		60.0	60.0			22.0	22.0		22.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.24	0.24		0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	4.3	4.3		5.0	5.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	204	2001		160	1986			304	330		145	
v/s Ratio Prot		0.45			0.39							
v/s Ratio Perm	0.43			c0.51				0.29	0.01		c0.64	
v/c Ratio	0.65	0.67		0.77	0.59			1.20	0.05		2.64	
Uniform Delay, d1	8.8	9.0		10.3	8.2			34.0	26.0		34.0	
Progression Factor	1.00	1.00		0.87	0.58			1.00	1.00		1.00	
Incremental Delay, d2	14.8	1.8		21.7	0.9			118.8	0.1		757.1	
Delay (s)	23.6	10.8		30.6	5.6			152.8	26.1		791.1	
Level of Service	С	В		С	Α			F	С		F	
Approach Delay (s)		12.0			8.0			133.7			791.1	
Approach LOS		В			Α			F			F	
Intersection Summary												
HCM 2000 Control Delay			109.8	H	CM 2000	Level of S	Service		F			
HCM 2000 Volume to Capac	ity ratio		1.27									
Actuated Cycle Length (s)			90.0		um of lost				8.0			_
Intersection Capacity Utilizat	ion		108.6%	IC	U Level o	of Service	<u> </u>		G			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	•	•	<b>†</b>	<i>&gt;</i>	<b>/</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	<b>∱</b> }		ሻ	<b>↑</b> ↑		ሻ	<b>^</b>	7	ሻ	<b>∱</b> ∱	
Volume (vph)	405	1383	121	244	1021	165	131	834	186	171	807	124
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2981		1509	2955		1509	3018	1350	1509	2957	
Flt Permitted	0.09	1.00		0.09	1.00		0.17	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	151	2981		138	2955		266	3018	1350	260	2957	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	426	1456	127	257	1075	174	138	878	196	180	849	131
RTOR Reduction (vph)	0	6	0	0	13	0	0	0	80	0	12	0
Lane Group Flow (vph)	426	1577	0	257	1236	0	138	878	116	180	968	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	54.0	47.0		54.0	47.0		31.9	24.9	24.9	31.4	24.9	
Effective Green, g (s)	52.0	47.0		52.0	47.0		29.9	25.0	25.0	30.4	25.0	
Actuated g/C Ratio	0.52	0.47		0.52	0.47		0.30	0.25	0.25	0.30	0.25	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.1	4.1	3.5	4.1	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0	1.0	5.0	
Lane Grp Cap (vph)	160	1401		154	1388		154	754	337	153	739	
v/s Ratio Prot	c0.16	0.53		0.10	0.42		0.05	0.29		c0.07	c0.33	
v/s Ratio Perm	c1.23			0.77			0.21		0.09	0.28		
v/c Ratio	2.66	1.13		1.67	0.89		0.90	1.16	0.34	1.18	1.31	
Uniform Delay, d1	20.7	26.5		25.1	24.2		31.5	37.5	30.8	33.0	37.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.91	0.53	
Incremental Delay, d2	765.7	66.2		327.8	8.9		49.1	88.2	2.8	124.5	148.2	
Delay (s)	786.4	92.7		352.8	33.1		80.6	125.7	33.5	154.4	168.1	
Level of Service	F	F		F	С		F	F	С	F	F	
Approach Delay (s)		239.8			87.7			105.7			166.0	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			158.7	Н	CM 2000	Level of	Service		F			
HCM 2000 Volume to Capa	city ratio		2.12									
Actuated Cycle Length (s)			100.0		um of lost				16.0			
Intersection Capacity Utiliza	ition		118.2%	IC	CU Level of	of Service	9		Н			
Analysis Period (min)			15									
c Critical Lane Group												

	•	<b>→</b>	•	•	<b>\</b>	1
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	ሻ	<b>†</b> †	<b>↑</b> ↑		W	
Volume (vph)	103	1716	1368	33	23	47
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.91	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1509	3018	3007		1421	
Flt Permitted	0.14	1.00	1.00		0.98	
Satd. Flow (perm)	223	3018	3007		1421	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	112	1865	1487	36	25	51
RTOR Reduction (vph)	0	0	1	0	44	0
Lane Group Flow (vph)	112	1865	1522	0	32	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		2	6		4	
Permitted Phases	2					
Actuated Green, G (s)	80.0	80.0	80.0		13.5	
Effective Green, g (s)	79.5	79.5	79.5		14.0	
Actuated g/C Ratio	0.78	0.78	0.78		0.14	
Clearance Time (s)	3.5	3.5	3.5		4.5	
Vehicle Extension (s)	0.2	0.2	0.2		3.0	
Lane Grp Cap (vph)	174	2363	2355		196	
v/s Ratio Prot		c0.62	0.51		c0.02	
v/s Ratio Perm	0.50					
v/c Ratio	0.64	0.79	0.65		0.16	
Uniform Delay, d1	4.8	6.2	4.8		38.6	
Progression Factor	0.22	0.21	1.00		1.00	
Incremental Delay, d2	10.1	1.6	1.4		0.4	
Delay (s)	11.2	2.9	6.2		39.0	
Level of Service	В	Α	Α		D	
Approach Delay (s)		3.4	6.2		39.0	
Approach LOS		А	Α		D	
Intersection Summary						
HCM 2000 Control Delay			5.3	H	CM 2000	Level of Servi
HCM 2000 Volume to Capac	ity ratio		0.70			
Actuated Cycle Length (s)			101.5	Sı	um of lost	time (s)
Intersection Capacity Utilizati	ion		79.7%		U Level c	
Analysis Period (min)			15			
c Critical Lane Group						

	۶	<b>→</b>	•	•	<b>←</b>	4	4	<b>†</b>	<i>&gt;</i>	<b>/</b>	<b>+</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ⊅			र्सी						4	
Volume (vph)	76	1710	4	8	1373	93	0	0	0	40	5	57
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0						4.5	
Lane Util. Factor	1.00	0.95			0.95						1.00	
Frt	1.00	1.00			0.99						0.92	
Flt Protected	0.95	1.00			1.00						0.98	
Satd. Flow (prot)	1509	3017			2988						1439	
Flt Permitted	0.13	1.00			0.94						0.98	
Satd. Flow (perm)	201	3017			2815						1439	
Peak-hour factor, PHF	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.92	0.95	0.92
Adj. Flow (vph)	83	1859	4	8	1492	101	0	0	0	43	5	62
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	50	0
Lane Group Flow (vph)	83	1863	0	0	1597	0	0	0	0	0	60	0
Turn Type	Perm	NA		Perm	NA					Split	NA	
Protected Phases		2			6					4	4	
Permitted Phases	2			6								
Actuated Green, G (s)	78.4	78.4			78.4						13.1	
Effective Green, g (s)	78.4	78.4			78.4						13.1	
Actuated g/C Ratio	0.78	0.78			0.78						0.13	
Clearance Time (s)	4.0	4.0			4.0						4.5	
Vehicle Extension (s)	0.2	0.2			0.2						3.0	
Lane Grp Cap (vph)	157	2365			2206						188	
v/s Ratio Prot		c0.62									c0.04	
v/s Ratio Perm	0.41				0.57							
v/c Ratio	0.53	0.79			0.72						0.32	
Uniform Delay, d1	4.0	6.1			5.4						39.4	
Progression Factor	0.22	0.21			0.71						1.00	
Incremental Delay, d2	7.5	1.7			1.5						1.0	
Delay (s)	8.4	3.0			5.4						40.4	
Level of Service	Α	Α			Α						D	
Approach Delay (s)		3.2			5.4			0.0			40.4	
Approach LOS		Α			Α			Α			D	
Intersection Summary												
HCM 2000 Control Delay			5.3	Н	CM 2000	Level of S	Service		Α			
HCM 2000 Volume to Capac	ity ratio		0.72									
Actuated Cycle Length (s)			100.0		um of los				8.5			
Intersection Capacity Utilizati	ion		88.2%	IC	CU Level	of Service			Е			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	<b>←</b>	•	•	<b>†</b>	/	<b>/</b>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	¥	<b>∱</b> }		¥	<b>↑</b> ↑		, A	ĵ»		7	f)	
Volume (vph)	27	1703	82	68	1333	18	74	280	50	24	219	82
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2997		1509	3012		1509	1552		1509	1524	
Flt Permitted	0.13	1.00		0.06	1.00		0.31	1.00		0.26	1.00	
Satd. Flow (perm)	207	2997		96	3012		490	1552		411	1524	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	1793	86	72	1403	19	78	295	53	25	231	86
RTOR Reduction (vph)	0	3	0	0	1	0	0	7	0	0	14	0
Lane Group Flow (vph)	28	1876	0	72	1421	0	78	341	0	25	303	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	66.1	66.1		66.1	66.1		25.9	25.9		25.9	25.9	
Effective Green, g (s)	66.1	66.1		66.1	66.1		25.9	25.9		25.9	25.9	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	136	1981		63	1990		126	401		106	394	
v/s Ratio Prot		0.63			0.47			c0.22			0.20	
v/s Ratio Perm	0.14			c0.75			0.16			0.06		
v/c Ratio	0.21	0.95		1.14	0.71		0.62	0.85		0.24	0.77	
Uniform Delay, d1	6.7	15.4		17.0	10.9		32.7	35.2		29.2	34.3	
Progression Factor	1.31	0.91		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	7.5		157.6	2.2		8.7	15.8		1.1	8.7	
Delay (s)	10.8	21.4		174.5	13.1		41.4	51.0		30.4	43.0	
Level of Service	В	С		F	В		D	D		С	D	
Approach Delay (s)		21.3			20.9			49.3			42.1	
Approach LOS		С			С			D			D	
Intersection Summary												
HCM 2000 Control Delay			25.7	H	CM 2000	Level of S	Service		С			
HCM 2000 Volume to Capac	ity ratio		1.05									
Actuated Cycle Length (s)			100.0		um of lost				8.0			
Intersection Capacity Utilizati	ion		100.5%	IC	U Level of	of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

	۶	<b>→</b>	•	•	•	•	4	<b>†</b>	/	<b>/</b>	<b>↓</b>	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		¥	<b>∱</b> }		¥	<b>∱</b> }	
Volume (vph)	51	331	33	60	142	60	32	1177	203	71	1056	44
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.97		1.00	0.98		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1561			1522		1509	2951		1509	3000	
Flt Permitted		0.93			0.87		0.25	1.00		0.25	1.00	
Satd. Flow (perm)		1466			1337		397	2951		397	3000	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	348	35	63	149	63	34	1239	214	75	1112	46
RTOR Reduction (vph)	0	8	0	0	10	0	0	35	0	0	7	0
Lane Group Flow (vph)	0	429	0	0	265	0	34	1418	0	75	1151	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	·
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Effective Green, g (s)		16.0			16.0		16.0	16.0		16.0	16.0	
Actuated g/C Ratio		0.40			0.40		0.40	0.40		0.40	0.40	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)		586			534		158	1180		158	1200	
v/s Ratio Prot								c0.48			0.38	
v/s Ratio Perm		c0.29			0.20		0.09			0.19		
v/c Ratio		0.73			0.50		0.22	1.20		0.47	0.96	
Uniform Delay, d1		10.2			9.0		7.9	12.0		8.9	11.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		7.9			3.3		3.1	99.2		9.9	17.8	
Delay (s)		18.1			12.3		11.0	111.2		18.8	29.5	
Level of Service		В			В		В	F		В	С	
Approach Delay (s)		18.1			12.3			108.9			28.9	
Approach LOS		В			В			F			С	
Intersection Summary												
HCM 2000 Control Delay			60.8	Н	CM 2000	Level of S	Service		Е			
HCM 2000 Volume to Capacity	ratio		0.97									
Actuated Cycle Length (s)			40.0	S	um of lost	time (s)			8.0			
Intersection Capacity Utilization	1		90.4%	IC	CU Level	of Service			Е			
Analysis Period (min)			15									

c Critical Lane Group

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		414	ħβ		W	-	
Volume (vph)	54	1391	1175	45	37	30	
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	
Total Lost time (s)		4.0	4.0		4.0		
Lane Util. Factor		0.95	0.95		1.00		
Frt		1.00	0.99		0.94		
Flt Protected		1.00	1.00		0.97		
Satd. Flow (prot)		3012	3001		1452		
Flt Permitted		0.82	1.00		0.97		
Satd. Flow (perm)		2480	3001		1452		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	59	1512	1277	49	40	33	
RTOR Reduction (vph)	0	0	2	0	28	0	
Lane Group Flow (vph)	0	1571	1324	0	45	0	
Turn Type	Perm	NA	NA		Prot		
Protected Phases		2	2		4		
Permitted Phases	2						
Actuated Green, G (s)		66.9	66.9		12.5		
Effective Green, g (s)		69.5	69.5		12.5		
Actuated g/C Ratio		0.77	0.77		0.14		
Clearance Time (s)		6.6	6.6		4.0		
Vehicle Extension (s)		5.0	5.0		3.0		
Lane Grp Cap (vph)		1915	2317		201		
v/s Ratio Prot			0.44		c0.03		
v/s Ratio Perm		c0.63					
v/c Ratio		0.82	0.57		0.22		
Uniform Delay, d1		6.4	4.2		34.4		
Progression Factor		1.00	0.33		1.00		
Incremental Delay, d2		4.1	0.9		0.6		
Delay (s)		10.5	2.3		35.0		
Level of Service		В	Α		С		
Approach Delay (s)		10.5	2.3		35.0		
Approach LOS		В	Α		С		
Intersection Summary							
HCM 2000 Control Delay			7.4	H	CM 2000	Level of Service	Α
HCM 2000 Volume to Capac	ity ratio		0.73				
Actuated Cycle Length (s)			90.0		um of lost		8.0
Intersection Capacity Utilizati	ion		105.0%	IC	U Level c	of Service	G
Analysis Period (min)			15				
c Critical Lane Group							

	-	•	•	•	<b>~</b>	<i>&gt;</i>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b> }		ሻ	<b>^</b>	W			
Volume (vph)	1745	23	36	1358	46	75		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.92			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3012		1509	3018	1428			
Flt Permitted	1.00		0.08	1.00	0.98			
Satd. Flow (perm)	3012		124	3018	1428			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1897	25	39	1476	50	82		
RTOR Reduction (vph)	1	0	0	0	24	0		
Lane Group Flow (vph)	1921	0	39	1476	108	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	4			
Permitted Phases			6					
Actuated Green, G (s)	80.0		80.0	80.0	13.5			
Effective Green, g (s)	79.5		79.5	79.5	14.0			
Actuated g/C Ratio	0.78		0.78	0.78	0.14			
Clearance Time (s)	3.5		3.5	3.5	4.5			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2359		97	2363	196			_
v/s Ratio Prot	c0.64			0.49	c0.08			
v/s Ratio Perm			0.31					
v/c Ratio	0.81		0.40	0.62	0.55			
Uniform Delay, d1	6.6		3.5	4.7	40.8			
Progression Factor	1.00		0.30	0.17	1.00			
Incremental Delay, d2	3.2		9.3	1.0	3.3			
Delay (s)	9.8		10.4	1.8	44.1			
Level of Service	А		В	А	D			
Approach Delay (s)	9.8			2.0	44.1			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay			7.8	Н	CM 2000	Level of Service	 Α	
HCM 2000 Volume to Capa	acity ratio		0.77					
Actuated Cycle Length (s)			101.5	S	um of lost	time (s)	8.0	
Intersection Capacity Utiliza	ation		72.5%	IC	CU Level o	of Service	С	
Analysis Period (min)			15					
c Critical Lane Group								

	-	•	•	•	<b>~</b>	<i>&gt;</i>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>†</b>	LDIX	ሻ	<b>^</b>	**	TTDIX		
Volume (vph)	1701	27	50	1394	62	76		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	0.95	1.00			
Frt	1.00		1.00	1.00	0.93			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3011		1509	3018	1437			
Flt Permitted	1.00		0.08	1.00	0.98			
Satd. Flow (perm)	3011		134	3018	1437			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1849	29	54	1515	67	83		
RTOR Reduction (vph)	1	0	0	0	29	0		
Lane Group Flow (vph)	1877	0	54	1515	121	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	8			
Permitted Phases	_		6	_	-			
Actuated Green, G (s)	78.4		78.4	78.4	13.6			
Effective Green, g (s)	78.4		78.4	78.4	13.6			
Actuated g/C Ratio	0.78		0.78	0.78	0.14			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2360		105	2366	195			
v/s Ratio Prot	c0.62			0.50	c0.08			
v/s Ratio Perm			0.40					
v/c Ratio	0.80		0.51	0.64	0.62			
Uniform Delay, d1	6.2		3.9	4.7	40.8			
Progression Factor	1.00		0.15	0.13	1.00			
Incremental Delay, d2	2.9		12.0	0.9	6.1			
Delay (s)	9.1		12.7	1.5	46.8			
Level of Service	А		В	А	D			
Approach Delay (s)	9.1			1.9	46.8			
Approach LOS	А			Α	D			
Intersection Summary							 	
HCM 2000 Control Delay			7.5	Н	CM 2000	Level of Service	Α	
HCM 2000 Volume to Capa	acity ratio		0.77					
Actuated Cycle Length (s)			100.0		um of lost		8.5	
Intersection Capacity Utiliza	ation		72.3%	IC	CU Level o	of Service	С	
Analysis Period (min)			15					
c Critical Lane Group								

	٠	<b>→</b>	<b>←</b>	•	<b>/</b>	4
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		414	<b>†</b> }		W	
Volume (veh/h)	17	1766	1395	42	4	26
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	1920	1516	46	4	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1562				2536	781
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1562				2536	781
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				80	92
cM capacity (veh/h)	419				21	338
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	
Volume Total	658	1280	1011	551	33	
Volume Left	18	0	0	0	4	
Volume Right	0	0	0	46	28	
cSH	419	1700	1700	1700	114	
Volume to Capacity	0.04	0.75	0.59	0.32	0.29	
Queue Length 95th (ft)	3	0	0	0	27	
Control Delay (s)	1.4	0.0	0.0	0.0	49.0	
Lane LOS	Α				Е	
Approach Delay (s)	0.5		0.0		49.0	
Approach LOS					E	
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utiliza	ation		81.3%	IC	U Level o	of Service
Analysis Period (min)			15			

## Appendix E Related Projects

#### West Hollywood - Relatede Projects 4-Apr-18

4-Apr-18			
Location	Project Description - Land Use	Intensity	Units
	Hotel	128	rm
	Condominiums	7	du
OOLA Barranka	Retail	5,535	sf
8816 Beverly	Restaurant/Bar	7,070	sf
	Outdoor dining	1,819	sf
	Apartments	28	du
1048 Curson	Condominiums	5	du
511 Flores st	Apartments	10	du
1216 Flores St	Condominiums	14	du
	Office/ Media Workshop	447,493	sf
LOAL Farmana Arra (Tha Las)	Stages	109,163	sf
1041 Formosa Ave (The Lot)	Storage	6,116	sf
	Commissary	5,300	sf
8210 Fountain Ave	Condominiums	9	du
I 123 Formosa	Condominiums	5	du
1009 Gardner	Condominiums	1	du
1003 Hancock	Apartments	3	du
1264 Harper Ave	Condominiums	14	du
1345 Havenhurst Dr	Condominiums	16	du
1342 Hayworth Ave	Condominiums	16	du
1125 Kings Rd	Condominiums	10	du
1201 La Brea Ave	Restaurant	4,575	sf
829 Larrabee	Apartments	13	du
1223 Larrabee St	Condominiums	8	du
8551 Melrose Ave	Retail	6,500	sf
8583 Melrose Ave	Retail	9,545	sf
8612 Melrose Ave	Restaurant	9,998	sf
0/50 1/4 1	Retail	14,571	sf
8650 Melrose Ave	Apartments	7	du
8008 Norton Ave	Condominiums	8	du
500 Orlando Ave	Apartments	4	du
8715 Melrose	Restaurant	8,997	sf
7914 Norton	Condominiums	8	du
1001 Ogden	Condominiums	5	du
I I 53 Ogden	Condominiums	6	du
1150 Orange Grove	Apartments	7	du
507 Orlando Ave	Apartments	9	du
	L	ı	-

	Hotel	241	rm
	Restaurant	33,300	sf
645 Robertson	Retail	18,130	sf
	Design Showroom	10,325	sf
	Nightclub	3,780	sf
1016 Martel	Apartments	11	du
	Apartments	166	dι
7143 Santa Monica Blvd	Retail	9,300	sf
	Hotel	81	rn
7811 Santa Monica Blvd	?	3,446	sf
	Apartments	79	dι
	Retail	4,365	sf
7965-7985 Santa Monica Blvd	Restaurant	13,682	sf
	Office	70,036	sf
	Grocery	25,000	sf
	café	1,319	sf
8550 Santa Monica BI	office	3,998	st
	heal/fitness club	8,000	st
	personal service	4,000	st
	Retail	9,850	sf
9001 Santa Monica Blvd	Restaurant	9,800	st
	Condominiums	42	dı
	Condominiums	76	dı
9040,9060,9080, 9098 Santa Monica Blvd	Retail	82,000	st
	office	137,000	si
	Condominiums	125	dı
8430 Sunset Boulevard	Commercial	35,000	sf
	Office	11,520	st
8497 Sunset	Restaurant	9,775	st
	Hotel	165	rn
8950 Sunset Blvd	Apartments	4	dı
	Restaurant	30	ks
	Hotel	190	rn
9040 Sunset Blvd	Condominiums	20	dı
	Restaurant & Spa	29,000	sf
I253 Sweetzer Ave	Condominiums	8	dı
8565 West Knoll Dr	Condominiums	6	dı
605 West Knoll	Retail	7	ks
1035 Vista	Townhome	4	dı
1159 Formosa Ave.	Apartments	5	dı
950 Ogden Dr.	Apartments	10	dı
750 Ogden D1.	Mixed-Use	3,446	sf

7811 Santa Monica Blvd	Residential	74	du
	Hotel	74	rm
1028 Kings Rd.	Condominiums	30	du
1236 Fairfax Ave.	Apartments	7	du
8017 Norton Ave.	Condominiums	34	du
812 Huntley Dr.	Apartments	5	du
8763 Rosewood Ave.	Retail/Office (Split is TBD)	4,945	sf
I 280 Sweetzer Ave.	Condominiums	9	dι
0712 D D	Residential	26	dι
8713 Beverly Blvd.	Art Gallery, Retail, Office	9,391	sf
563 N. Alfred St.	Educational (addition)	67,000	sf
545 Sweetzer Ave.	Apartments	9	dι
649 Huntley Dr.	Apartments	3	dι
	Restaurant	8,600	sf
70/5 0 14 1 71 1	Entertainment	3,200	st
7965 Santa Monica Blvd.	Retail	4,400	S
	Office	62,800	Si
1125 Detroit St.	Apartments	22	dı
	Creative Office/ Private Club	46,009	si
	Arts Club	46,279	S
	Arts Club Guestrooms	14,964	si
8920 Sunset Blvd (The Arts Club)	Retail, Galleries, Lobbies	14,125	si
	Pool Terrace/Garden/MEP	3,469	si
	Drop-offs, Dock, BOH	17,890	si
615 Knoll Dr.	Apartments	3	dı
II53 Ogden Dr.	Condominiums	6	dı
923 Palm Ave.	Senior Housing	49	dı
947 Genesee Ave.	Condominiums	10	dı
	Restaurant	2,318	si
900 Fairfax	Retail	930	S
	Residential	6	dı
1027 Gardner St	Condominiums	5	dı
1013 Spaulding Ave.	Condominiums	5	dı
1221 Detroit St.	Condominiums	10	dı
8465 Melrose Ave.	Retail	4,122	si
1201 Detroit St	Condominiums	10	dı
1030 Sierra Bonita Ave.	Condominiums	5	dı
1141 Detroit St.	Condominiums	5	dı
1011 Sierra Bonita Ave.	Condominiums	5	dı
1012 Cory Ave.	Condominiums	6	dı
1120 Larrabee St	Apartments	22	dı
1136 La Cienega Blvd.	Condominiums	23	dι

1227 Formosa Ave	Apartments	5	du
	Hotel	185	rm
	Banquet	17,172	sf
0034 5 1 Dh.d	Restaurant	7,536	sf
9034 Sunset Blvd.	Gallery	915	sf
	Retail	5,722	sf
	Apartments	14	du
1006 Edinburgh Ave.	Condominiums	10	du
I I 50 Clark St.	Apartments	7	du
1236 Spaulding Ave	Apartments	3	du
621 Kings Rd.	Apartments	4	du
8116 Norton Ave.	Apartments	8	du
939 Spaulding Ave.	Condominiums	22	du
1041 Spaulding Ave.	Condominiums	14	du
933 Spaulding Ave.	Condominiums	5	du
621 Huntley Dr.	Apartments	3	du
634 Huntley Dr.	Apartments	3	du
943 Stanley Ave.	Condominiums	5	du
417 Robertson Blvd.	Showroom	7,558	sf
901 Ogden Dr.	Apartments	4	du
701 Ogach D1.	Market-Rate Apartments	68	du
1317 Crescent Heights Blvd.	Affordable Apartments	7	sf
938 Genesee Ave.	Condominiums	5	du
736 Genesee Ave.	Restaurant	5,240	sf
1040 N. La Brea	Residential	3,240	du
1040 IN. La Brea	Hotel	91	
IOII Orden Du	Condominiums	5	rm
1011 Ogden Dr.			du
1223 Hayworth Ave.	Apartments	12	du
1011 Crescent Heights Blvd.	Apartments	12	du
1257 Sweetzer Ave.	Condominiums	12	du
1019 Orange Grove Ave.	Apartment	9	du
1052 Martel Ave.	Condominiums	5	du
1005 Genesee Ave.	Condominiums	5	du
510 Robertson Blvd.	Restaurant	703	sf
8553 Knoll Dr	Condominiums	5	du
	Residential	71	du
7617 Santa Monica Blvd.	Retail	4,821	sf
	Restaurant	4,419	sf
1251 Detroit St.	Apartments	5	du
852 Knoll Dr.	Condominiums	6	du
1301 Fairfax Ave.	Condominiums	10	du
1006 Hancock Ave.	Apartments	6	du

926 Hilldale Ave.	Condominiums	3	du
528 Flores St.	Apartments	4	du
7905 Romaine St.	Office/Retail	1,800	sf
7705 Komaine St.	Residential	35	du
	Apartments	5	du
	Showroom	15,727	sf
600 La Cienega Blvd.	Mechanical	2,776	sf
	Retail	5,355	sf
	Restaurant	7,094	sf
(24 La Cianara Blud	Apartments	6	du
624 La Cienega Blvd.	Retail	54,209	sf
8760 Shoreham Dr.	Apartments	11	du
8000 Fountain Ave.	Apartments	30	du
1046 Genesee Ave.	Condominiums	5	du
1017 Sierra Bonita	Condominiums	5	du
I I 39 Detroit St.	Condominiums	5	du
	Restaurant	4,394	sf
	Affordable Residential	15	du
8899 Beverly Blvd.	Market-Rate Residential	61	du
	Retail	19,755	sf
	Office	6,321	sf
8553 N West Knoll Dr.	Condominiums	5	du
8557 N West Knoll Dr.	Townhomes/Condominiums	6	du
1008 N Ogden Dr.	Condominiums	7	du
916 Westbourne Dr.	Apartments	8	du
948 N San Vicente Blvd.	Apartments	18	du
1250 N. Fairfax Ave.	Apartments	53	du
	<u>'</u>	ļ	

**CLATS**Case Logging and Tracking System

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### **RELATED PROJECTS**

Centroid Info: PROJ ID: Address  Lat/Long  Buffer Radius: 1.5  Search	7617 SANTA MONICA BLVD WEST HOLLYWOOD, CA 90046 34.091, -118.356			Incl		LL "FirstStudyS Inclu	ubmittalDa de "Inactiv ow in Relato Ne	"Trip info":  ate" (latest)  e" projects:  ed Project":  t_AM_Trips  st_PM_Trips  - S						
Record Count: 48   Record Per Page: All Records V  Proj ID Office Area CD Year Project Title Project Desc	First Study Address Submittal	Distance					Net_	Daily_Trips - S			Results gen	erated since	:: (8/7/2018	3 2:50:06 PM,
Sunset Time - Sunset Time - adjacent to House Mixed Use  Mixed use project adjacent to House of Blues site,which closed 8/2015	<b>Date</b> 8418 Sunset Bl 08/24/2004	(mile)		S.F. Gros	75000	120	Net_PM_Tr 296 <b>296</b>	ips Net_Daily_Tri		75 <b>46</b>	162 <b>75</b>	n NetPMO 134 <b>162</b>	75,000 S	nments SF retail & dential units
Mixed-use (118 <u>31328</u> Metro MTR 5 2004 La Brea condos, 26.4K SF retail & 3K SF rest)	101 S LA BREA AV 08/28/2006	5 1.4	Land_U Retail Condomin Mixed Use Other	S.F. Are niums Tot S.F. Are	al Units Gross a Gross	size Net_Al 26400 180 63 3000	92 92	1503			NetAMOut	65 2	27	Net restaurant
33894 Metro HWD 4 2006 Office (Completion 2016)	959 N SEWARD ST 03/28/2007	' 1.3	Office	Unit_ID S.F. Gross Area	237568	336	Net_PM_Tr 310 <b>310</b>	2337 2337	ps NetAMI	39 <b>297</b>	58 <b>39</b>	n NetPMO 252 58		
33973 Metro HWD 4 2007 Temple Israel of Temple expansion Hollywood and improvements	7300 W HOLLYWOOD BLVD 05/01/2007	7 0.8		Unit_ID Other			PM_Trips N			tAMOut N	etPMIn Ne	tPMOut C	<b>Comments</b> et new trips	-
restaurant/club 11.4KSF Qual Rest, (Frederick's of Hollywood 9.4KSF bar/lounge, bldg) 3KSF off	' 6608 W HOLLYWOOD BLVD 08/14/2007	' 1.5	Land_Use Other	Unit_ S.F. Gros		ne Net_AM_Trip	195 195	Trips Net_Daily_1 1292 1292	13	/In NetAM 2 13	Out NetPl 129 <b>2</b>	Min NetPM 66 129		ments net trips
			Office	S.F.	<b>size N</b> 33190	let_AM_Trips N	et_PM_Trip	s Net_Daily_Trip	s NetAMIn	NetAMOu	t NetPMIn	NetPMOut	Com	nments

<u>34677</u>	Metro HWD 5	2008	Mixed Use - Office/Retail	88750 SF Office, 12000 Retail	936 N LA BREA AV	05/02/2008	0.7	Retail	S.F. Gross Area	19923	29 <b>29</b>	38 <b>38</b>	911 <b>911</b>	24	5 <b>24</b>	14 <b>5</b>	37 <b>14</b>	fo m (5	otal reflects credit r existing anufacturing 9750 SF)
<u>34785</u>	Metro MTR 4	2008	Seward St Office Project	130000 GSF Office	956 N SEWARD ST	11/19/2008	1.3			Area 1	30000 186 <b>186</b>	180 <b>180</b>		110	65 2	21 <b>165</b>	29 <b>21</b>	151 <b>29</b>	net trips
<u>35085</u>	Metro WLA 5	2009	Yeshivath Torath Emeth Academy Expansion	120 Student Pre-K and Kindergarten, with 60 child nursery school	7002 W CLINTON ST	08/11/2009	1.0		Unit_ID Enrollmen Enrollmen	nt 120	38	23	ips Net_Daily_Trip	20	18	11	12	Pr Kil Nu re cr	e-Kindergarten & ndergarten ursery School (total flects existing use edit for same uses)
										1 1	38	23	155	<u> </u>	20	18			
								Land_Use	Unit_ID S.F.	size	Net_AM_Trip	os Net_PM_1	rips Net_Daily_Tri	ps NetAM	In NetAl	MOut No	etPMIn N	letPMOut	Comments
			Hollywood					Office		10415	5								
<u>35344</u>	Metro HWD 4	2010	Center Studios Office	104,155 SF Office, 1970 SF Storage	6601 W ROMAINE ST	07/26/2010	1.3	Other	S.F. Gross Area	1970	92	51	808	88	4	12	31	9 (	otal reflects credit or existing 37 KSF Office, 4.4 KSF stage, 2.3 KSF storage.
											92	51	808		88	4	1	2 3	39
			Selma	66 Affordable				Land_Use				os Net_PM_	rips Net_Daily_Tr	ps NetAM	IIn NetAl	MOut N	etPMIn N	letPMOut	Comments
<u>35384</u>	Metro HWD 13	2010	•	Apartments	1603 N Cherokee Av	10/13/2010	1.3	Apartment	s Total Un	nits 66		41	439	7	27	26	5 1		otal net trips
			Housing						<u> </u>		34	41	439		/	2	<u> </u>		15
								Land_Use	Unit_ID Total	size	Net_AM_Tri	ps Net_PM_	Trips Net_Daily_Tr	ips NetAN	IIn NetA	MOut N	etPMIn N	NetPMOut	Comments
			Beverly &					Apartment	Units	71									
<u>35577</u>	Metro MTR 5	2010	,	71 Apartments, 11454 SF Retail	7901 W Beverly Bl	12/20/2010	1.1	Retail	S.F. Gross Area	1145	4 36	46	493	7	29	30	0 1	6	Total reflects credit for existing retail (10.7 KSF) and pass-by trips.
											36	46	493		7	2	9 3	30	16
								Land_Use		_	e Net_AM_Ti	rips Net_PM	_Trips Net_Daily_1	rips NetA	MIn Net	AMOut	NetPMIn	NetPMOu	
35655	Metro HWD 5	2011	La Brea	Mixed-Use: 33.5ksf supermarket & 179	915 N La Brea Ave	03/09/2011	0.7	Other	S.F. Gros	ss 335	00 91	248	2615	5	86		158	90	Supermarket (Total net trips)
			Gateway	apartments				Apartment	Total S Units	179									
											91	248	2615		5		86	158	90
								Land_Use	Unit	_ID	size Net_Al	M_Trips Net	_PM_Trips Net_Da	ily_Trips N	letAMIn	NetAM	Out NetP	MIn NetPN	1Out Comments
<u>35695</u>	Metro MTR 5	2011	375 Luxe	125 apts & 7,900 sf	375 N La Cienga Blv	04/07/2011	1.5	Apartment			125								
				retail		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Retail	S.F. Gros	ss Area	17400 55 <b>55</b>	45 <b>45</b>	168 <b>168</b>	8		47 <b>8</b>	34 <b>47</b>	34	Total net
							l	Land Hr-	1154 15		<u>.</u>		Trips Net_Daily_T	rine Net C				<b>.</b>	
				249 Apartments				Land_Use	Total			ips Net_PM	_irips Net_Daily_I	rips NetAl	viin Net <i>F</i>	AIVIOUT	vethiviin	NetriviOut	Comments Proj replaced Proj
<u>35807</u>	Metro HWD 13	2011	Mixed-Use	248 Apartments, 14710 Sf Retail	1610 N Highland Av	12/08/2011	1.2	Apartment	Units	248									ID 34435?
									S.F. Gros	SS									Total includes

					Retail	Area	12785	112	150	1805	22	90	96	54	credit for 6.9 KSF Office.
								112	150	1805		22	90	96	54
Highland Ave 34782 Metro HWD 4 2008 Indigo Hotel Project	100-rm business hotel	1841 N Highland Av	12/12/2011	1.4	Land_Use Other	e Unit_ID si Rooms 1		5	0 6	Net_Daily_Trips 194 194	NetAMIn         Netamental           29         19           29         29	2	NetPMIn         No           26         24           19         20	roo	Comments oms, business hotel
40358 Metro HWD 4 2012 Apartments	76 Apartments	1411 N Highland Av	07/02/2012	1.1	Land_Us Apartmen Retail	nts Total Ur S.F. Gros	nits 7	6	M_Trips   Net_P   72   72	M_Trips	Aily_Trips Net	43 <b>23</b>	45 43	26	MOut Comments  Total net trips  26
40087 Metro HWD 4 2012 Apartment Project	118 Apts.	1824 N Highland Ave	07/30/2012	1.4		nts Total Ur	nits 118	51 <b>51</b>	62 <b>62</b>	ips Net_Daily_1 667 <b>667</b>	10	41 <b>10</b>	40 <b>41</b>	22 <b>40</b>	Total net trips 22
Ava Hollywood	786apts, 4ksf rest.,				Mixed Us  Apartmen	Total Units	695	Net_AM_ 289	261	Trips Net_Daily 1420	7_Trips NetAN	MIn NetAl	MOut NetPl	MIn NetPM0	Total Net Project Trips
40055 Metro HWD 13 2013 (The Levington)	5.5ksf coffee shop/juice bar,& 12.7ksf retail	6677 W Santa monica blvd	01/29/2013	1.2	Other Other Retail	S.F. Gros Area S.F. Gros Area S.F. Gros Area	55 5500	0							Restaurant  Coffee shop and/or juice bar
					Land_Us			289 et_AM_Trip	261 s Net_PM_Trip	1420 os Net_Daily_Tr	ips NetAMIn	123 NetAMO	166 ut NetPMIn	153 NetPMOut	108 Comments
40779 Metro HWD 4 2012 Tutoring Center	Expedited CPC Case	927 N Highland av	03/07/2013	1.0	School Other	Enrollmer Employee			40	155	4	-1	23	17	Tutoring Total net trips (Use=Tutoring, credit for exist)
					Land_Us		size Net	_AM_Trips	40 Net_PM_Trips	155 Net_Daily_Trip		4 etAMOut		letPMOut	Comments and
41638 Metro WLA 5 2013 Starbucks	806 SF Coffee/Donut With Drive-Thru	859 N Highland Av	11/26/2013	1.0	Other	S.F. Gross & Area	306 41			330	21 20		9 9	U: W Pa	se=Coffee/Donut /Drive-Thru. 50% ass-by credit applied
					lond !!	so	41			330	inc Not A Min		20 9		Comment
	mixed-used project				Land_Us	Total	44	et_AIVI_I ří	os ivet_Pivi_Iff	ps Net_Daily_Ti	ipsinetAMin	INETAIVIO	utivetPivili	INECPIVIOUI	Comments
40829 Metro HWD 4 2012 Mixed-Use	at the corner of Sunset Blvd. and Detroit St.	7120 W Sunset Blvd	12/09/2013	0.8	Other	S.F. Gross Area	2900 1	4	29	397	0	14	25	4	Land Use=Restaurant. Credit for existing & transit applied
							1	4	29	397		0	14	25	4
41328 METRO HWD 4 2013	111ksf retail & 249	8150 W SUNSET BL	12/10/2013	0.8	Land_Us	nts Total Units	249	Net_AM	Trips Net_PM	_Trips Net_Dail	y_Trips NetA	MIn NetA	MOut NetF	PMIn NetPM	includes 28 low income units
Sunset (MU)	apts				Retail	S.F. Gros Area	1100	00 -82	216	1077	-92	10	158	58	Total project net trips

										Ì	-82	216	1077		-92	10	158	58
							Land_Use	e Unit_I	D	size	Net_AM_Trip	s Net_PM_Trip	s Net_Daily_Trip	NetAMIr	NetAMOu	t NetPMIr	NetPMOut	Comments
41934	Motro MTP 5	2014 925 La Brea Av	17ksf shopping ctr	925 N LA BREA AV	06/17/2014	0.7	Retail	S.F. Gross Area		5265								Retail
41334	Metro Mirk 3	2014 923 La Blea AV	& 53ksf office	323 N LA DRLA AV	00/17/2014		Office	S.F. Gross Area	5 4	16527	69	85	735	58	11	24	61	Total Project Trips
											69	85	735		58	11	24	61
							Land_Us	se Unit_	ID s	size	Net_AM_Trip	s Net_PM_Trip	s Net_Daily_Trips	NetAMIr	NetAMOu	NetPMIn	NetPMOut	Comments
		2014 904-932 N La	169 apts & 40ksf				Apartmer	nts Total U	nits 1	69	93	186	2072	25	68	83	103	Total net project trips
42266	Metro HWD 4	2014 Brea MU	retail	904 N LA BREA AV	07/22/2014	0.7	Retail	S.F. Gro Area	oss 4	0000								
											93	186	2072		25	68	83	103
							Land_l	Use U	nit_ID	size	Net_AM_Trip	os Net_PM_Tri	ps Net_Daily_Trip	s NetAMI	n NetAMO	ıt NetPMI	n NetPMOu	t Comments
		Mixed-Use	195 Apartments, 29				Apartmer		al Units		5							
42668	Metro HWD 1	3 2014 (Hollywood	Condos, 985 SF	1718 N Las Palmas Av	11/13/2014	1.4	Condomi	niums Tota	al Units Gross									transit credit
		Cherokee)	Retail				Retail	Area		985	105	124	1333	21	84	81	43	applied
											105	124	1333		21	84	81	43
							Land_Us	se Unit_I	D siz	ze N	et_AM_Trips	Net_PM_Trips	Net_Daily_Trips	NetAMIn I	NetAMOut	NetPMIn N		Comments
10.150			70.4	4000 1111 1	05 (00 (0045		Apartmer	nts Total Units	72	38	8	66	714	11 2	27	38 2	28 t	otal includes ransit, internal redit
42458	Metro HWD 4	2014 Mixed-Use	72 Apartments	1233 N highland av	05/08/2015	1.0	Retail	S.F. Gro	oss 178	830								realt
								Area		3	8	 66	714	1	11 2	27 3	38 2	28
						_ 	Land Us	se Unit II	Disize				et_Daily_Trips Ne					Comments
						Ī	Apartmer	Total	410			.c_i w_inpoin	cc_buny_111ps 11c	trainin ite	thinout ite		ti iiiout	Comments
							- грагинет	Units S.F.	710									
			410 Apartments, 5				Retail	Gross	5000	0								
42407	Metro HWD 4	2014 Mixed-Use	KSF Retail, 5 KSF	7107 W HOLLYWOOD BLVD	05/11/2015	1.0		Area	_								(1 -	
			Restaurant					S.F.										nd use = staurant) Total
						(	Other	Gross	5000	0 206	25	3 26	37 49	157	7 167	7 86		lude existing urch and transit
								Area									cre	
										206	5 25	3 2	537	49	15	7 16	7 86	
							Land_Use	e Unit_ID		Net	t_AM_Trips No	et_PM_Trips N	et_Daily_Trips No	etAMIn Ne	etAMOut Ne	etPMIn Ne	etPMOut	Comments
						(	Other	Rooms	167								AL	L SUITE HOTEL
						(		S.F. Gross Area										ound Flr Retail
<b>∆</b> 1771	Metro HWD 1	3 2014 Hyatt House Hotel & Retail	167 hotel rms,	6611 W HOLLYWOOD BLVD	0 07/16/2015	1.5		S.F. Gross Area									Re	d Flr Hi-Turnover staurant
<del>41//1</del>	MENO HVVD I	Hotel & Retail	10.5ksf retail	SOLI W HOLLIWOOD BLVD	· 01/10/2013		Other	S.F. Gross Area	3980	)								d Flr Quality staurant
							Other	S.F. Gross Area	1634	43	6	8	1 23	20	-8	14		mmunity theater; tal net project
										43	6	8	1	23	20	) -8		
						[	Land_Use	e Unit_I	D si	ize Ne	et_AM_Trips N	let_PM_Trips	Net_Daily_Trips N	letAMIn N	letAMOut N	letPMIn N	etPMOut	Comments
									•	•	·		•	•	·		•	•

<u>42970</u>	Metro WLA 5	2015 Jewish Family Service	28341 SF Office	320 N Fairfax av	07/17/2015	1.0	Other	S.F. Gross Area		37 <b>37</b>		5 <b>!5</b>	276 <b>276</b>	28	9	4 <b>9</b>	21	Total Net Project Trips 21
							1 1 11-	- 11-24 15	<u> </u>				ps Net_Daily_Tr				41 11-4004	
		Melrose	40 Apartments,				Land_Us Apartmer	nts Total Uni			AM_Trips r	<b>Net_PM_Tri</b> 32	334	4	17	20	12	Out Comments  credit for existing auto repair
<u>43601</u>	Metro WLA 5	2015 Crossing - Mixed-Use	7565 SF Retail	7000 W Melrose av	12/03/2015	0.9	Retail	S.F. Gross Area	s 756	5								'
										21	3	32	334		4	17	20	12
							Land_Use	e Unit_ID	size l	Net_AM	/I_Trips Net	t_PM_Trips	Net_Daily_Trips	NetAMIn	NetAMOut	NetPMIr	NetPMO	t Comments
							Other	Total Units 1	00									Sr Housing
43235	Metro HWD 4	McCadden 2015 Campus	Sr. & Youth housing complex, admin bldg. &	1118 N MCCADDEN	02/02/2016	1.1	Other	Total 9 Units	)2									Youth Housing (35DU), Emergency Overnight Beds (21DU), Transitional Living Beds (34DU) - LU253
		·	retail				Office	S.F. Gross 1 Area	7040									Admin Office
							Other	S.F. Gross 2 Area	9650 8	30	109		1346	49	31	53	56	Youth & Sr Ct; Total net project trips
									8	30	109	9	1346		49	31	53	56
							Land_Use	e Unit_ID	size N	let_AM	1_Trips Net	PM_Trips	Net_Daily_Trips	NetAMIn	NetAMOut	NetPMIn	NetPMOu	t Comments
<u>44113</u>	Metro HWD 4	2016 Gelson's Supermarket	32435 SF Supermarket	1502 N Gardner st	03/03/2016	0.5	Other	S.F.	2435 4		142			30	19	74	68	land use=supermarket Credits applied for existing uses and pass-by.
									4	19	142	2	1522		30	19	74	68
							Land_Us	se Unit_ID	size	Net_AM	/I_Trips Ne	t_PM_Trips	Net_Daily_Trips	NetAMIr	NetAMOu	NetPMI	n NetPMO	ut Comments
<u>42775</u>	Metro HWD 1	3 2014 Apartments	71 Apartments	1749 N LAS PALMAS AV	05/26/2016	1.4	Apartmer	Total		26	40		426	5	21	25	15	Credit for existing uses applied.
										26	40		426		5	21	25	15
		Cuasanaada	Crossroads				Land_Use		_	e Net_A	AM_Trips	let_PM_Tri	ps Net_Daily_Tri	ps NetAN	IIn NetAMO	ut NetPN	/IIn NetPM	Out Comments
<u>43805</u>	Metro HWD 1	3 2015 Crossroads Hollywood	Hollywood Mixed-	6701 W SUNSET BL	06/03/2016	1.2	Mixed Us	se S.F. Net A	rea	879		281	14833	381	498	733	548	
		,	Use Project							879	<b>I</b>	281	14833		381	498	733	548
							Land_Us	se Unit_II	D si	ze Net	t_AM_Trip	s Net_PM_1	rips Net_Daily_	Trips Net	AMIn NetAl	/Out Net	PMIn NetP	
			231 apts, 5ksf				Apartmer	nts Total Uni		1 78		84	1010	0	78	86	19	Total net project trips
<u>44563</u>	Metro HWD 4	2016 6901 Santa Monica MU	restaurant, 10ksf retail	6901 W SANTA MONICA BL	07/07/2016	0.9	Other	S.F. Gros	50	00								restaurant
			retaii				Retail	S.F. Gross Area	10	000								
										78	}	84	1010		0	78	86	19
							Land_Use	e Unit_ID	size	Net_A	AM_Trips	Net_PM_Tri	ps Net_Daily_Tr	ips NetAN	VIIn NetAMO	Out NetPl	VIIn NetPM	Out Comments
<u>44309</u>	Metro HWD 4	2016 7007 W.	49,981 sf office & 3,555 sf retail	7007 W Romaine st	09/01/2016	0.8	Office	S.F. Net Area		31 71		74	572	63	8	17	57	Total net project trips
		Romaine St. Office and	3,333 SI TELAH				Retail	S.F. Net	3555	5								

Retail						Area											
								71	74	5	572		63	8	17	5	7
44448 Metro HWD 4 2016 Apartments	50 Apartments	7900 W Hollywood bl	09/21/2016	0.8	Land_Use	<b>-</b>	size 50		Net_PM	Trips Net	_Daily_Trips		NetAMOut	NetPMI	n NetPM	total	Comments includes credit cisting uses and
						OTITES		10	22	254	1		,	1.0	1.4	trans	t
						<u> </u>		19	22	251		[3		16	14	8	
					Land_Use	Unit_II	) si	ize Net_AN	/I_Trips Net	PM_Trips	Net_Daily_T	rips NetAN	/IIn NetAM	IOut Net	PMIn Net	PMOut	Comments
					Other	S.F. Net Area	50	00								S	ynagogue
Unified Elder Care	5ksf synagogue,				Apartment	1	its 10	2									
43298 Metro MTR 5 2015 Care Facility/Mixed-Use	102 apts, 15ksf med off,1ksf retail	8052 W BEVERLY BL	12/12/2016	1.2	Office	S.F. Net Area	15	000									nedical office
030					Retail	S.F. Net Area	10	00 45	70		725	19	26	21	49	t	otal net project rips
								45	70		725		19	26	21	4	19
					Land_Use	Unit_l	D s	size Net_AN	/_Trips Net	PM_Trips	Net_Daily_T	rips NetAN	IIn NetAM	Out Net	PMIn Ne	PMOut	Comments
44743 Motro MTD 5 2016 8000 Beverly	48 apartments, 7.4	8000 W BEVERLY BLVD	12/12/2016	1 1	Apartment	s Total Un	its 4	8 57	59		774	21	36	42	17		otal net project rips
44743 Metro MTR 5 2016 8000 Beverly Mixed-Use	48 apartments, 7.4 KSF Retail	8000 W BEVERLY BLVD	12/12/2016	1.1	Other	S.F. Gros Area	s 7	400								F	Restaurant
								57	59		774		21	36	42	•	17
					Land_Use	Unit_ID	size	Net_AM_T	rips Net_PN	1_Trips Ne	t_Daily_Trips	NetAMIn	NetAMOu	t NetPM	In NetPN	10ut	Comments
TI CI II	021				Other	Rooms	93	45	56	76 <sup>-</sup>	1	27	18	27	29		el rooms; Total
45061 Metro MTR 4 2016 The Chaplin Hotel Project	2.8ksf restaurant	7219 W SUNSET BL	01/26/2017	8.0	Other	S.F. Gross	2800	)									project trips aurant
					Other	Area	2000	45	56	76	1		27	18	27	29	durant
						T				I	1						
					Land_Use						Net_Daily_T						Comments Total net project
Conset Mired	219 apts, 20KSF				Apartment	S.F. Gros	_		178		1239	63	125	117	7 61		trips
45381 Metro HWD 4 2017 Sunset Mixed- Use	retail, & 10KSF restaurant	7510 W SUNSET BL	01/27/2017	0.5	Retail	Area	20	0000									
	restaurant				Other	S.F. Gros Area	s 10	0000									Restaurant
								188	178	3	1239		63	12	5 11	7	61
					Land_Use	Unit_ID	size	Net_AM_Tri	ips Net_PM	Trips Net	_Daily_Trips	NetAMIn	NetAMOut	NetPMI	n NetPM	Out	Comments
45074 M . MTD 5 2046 5 11 D .	22.6ksf HT-		02 (02 (0247	4.4	Other	C.F. NI-4	2600		223	287			110	134	89	HTS trips pass	Restaurant. Total includes transit, by and aced land use ts.
45271 Metro MTR 5 2016 Edin Park	Restaurant,11.2ksf Office Space	8001 W Beverly Blvd	02/08/2017	1.1		S.F. Net Area	1358	16	40	374		8 8	3	23	17	trips pass- displ credi	
								260	263	324	48	,	142	118	157	106	
					Land_Use	Unit_ID	size N	Net_AM_Trip	ps Net_PM_	Trips Net_	Daily_Trips N	NetAMIn N	etAMOut	NetPMIr	NetPMC	Out	Comments
					Other	Rooms 1	98 9	98	143	1666	5	68 4	0	80	63		se=hotel total es credits for

																						tra by	nnsit, internal, pass-
<u>45646</u>	Metro HV	/D 13	2017	Schrader Hotel MU	198 Room Hotel, 2379 SF	1600 N SCHRADER BLVD	05/09/2017	1.5	Other	S.F. Gross Area	2379											lar	nd use=bar/lounge
				MU	bar/lounge, 3600 SF restaurant.				Other	S.F. Gross Area	3600											lar	nd use=restaurant
												98	14	3	16	666		58	4	10	80	63	3
									Land_Use	Unit_II	D size	e Net_A	M_Trips N	et_PM_	_Trips N	let_Daily_Tr	ps NetAN	IIn NetA	AMOut	NetPM	In NetPl		Comments
<u>45063</u>	Metro HV	/D 13	2016	Apartments	86 Unit Apartment	1601 N LAS PALMAS AV	06/21/2017	1.3	Apartment	Total Units	86	32	28	3		57	4	28		20	8	u	otal includes existing se credit.
												32	2	8	1	57		4		28	20	8	
					8 single family				Land	_Use			size Net_A	M_Trip	s Net_P	M_Trips Ne	t_Daily_Tr	ips Net	AMIn N	etAMO	ut NetPl	VIIn Ne	tPMOut Comments
43271	Metro HV	/D 5	2015	750 Edinburgh Ave Res Proj	residential units; VTT-73442-SL	750 N Edinburgh Ave	08/30/2017	0.6	Single Fam	nily Home	Tota Unit		3 2		3	23		1	1		2	1	
					V11-73442-3L								2		3	23			1		1	2	1
									Land_Use	Unit	_ID	size	Net_AM_T	rips Ne	et_PM_1	rips Net_Da	ily_Trips	NetAMI	n NetAl	MOut N	letPMIn	NetPM	1Out Comments
					210 - 1 201 - 1				Apartment			219	188	17	<b>'</b> 8	2049		63	125	1	17	61	
<u>47007</u>	Metro M	R 4	2018	7500 Sunset (revised)	219 apt, 20k sf shopping, 10k sf	7500 w sunset blvd	04/12/2018	0.5	Retail	S.F. Gro Area	)SS	20000											shopping center
				(revised)	restaurant				Other	S.F. Gro Area	SS	10000											restaurant
													188	17	78	2049			63	1	25	117	61
									Land_Use	Unit_ID	size	Net_Al	VI_Trips Ne	et_PM_1	Trips No	et_Daily_Tri	os NetAM	In NetA	MOut N	NetPMI	n NetPIV	Out	Comments
<u>47140</u>	Metro M1	R 5	2018	431 N La Cienega Bl Residential Project	72 Apartment Units	431 N LA CIENEGA BL	05/18/2018	1.4	Apartment	Total Units	72	1	-34	4	-4	09	-9	10	-	12	-22	tri ex	otal net project ps.Credits for cisting land use, ansit, and pass-by.
												1	-3	4	-4	109		-9	1	10	-12	-2	22
									Land_Use	Unit_I	D size	e Net_A	AM_Trips N	let_PM	I_Trips I	Net_Daily_T	ips NetA	MIn Net	AMOut	NetPN	IIn NetP		Comments
					MIXED-USE				Apartment	Total Units	45	26	3	6	2	128	9	17		23	13	1	Credit applied for transit, pass-by and existing uses.
<u>46973</u>	Metro Mi	R 5		THIRD STREET MIXED-USE	PROJECT W/ 50DU & 7,252 SF GRD	8000 W 3RD ST	06/21/2018	1.4	Other	Seats	5											I	and use=affordable nousing
					FLR COMMERCIAL				Retail	S.F. Gross Area	625	2											
												26	3	86	4	<b>128</b>		9		17	23		13

Status Key	ADDRESS	PROJECT NAME & DESCRIPTION	EXISTING USE	PROPOSED USE	STATUS	ITE CODE*	SIZE	UNITS	AM IN	AM OUT	AM TOTAL	PM IN	PM OUT	PM TOTAL	WKEND PK IN	WKEND PK OUT	WKEND TOTAL	ADT TOTAL	Notes
1 - Application Under Review	<u> </u>				ACT	IVE PROJECTS													*ITE Codes from 8th Edition are used
2 - Entitlement Approved	100 N. Crescent Dr.	Zone Text Amendment, General Plan Amendment, and Planned Development Permit request to create a new Entertainment Office Planned Development Overlay	2,550 SF Screening Room, 103,535 SF	Commercial Office: 4,330 SF of restaurant, 2,489 SF of	1	Office (N/A)	50.74	KSF	45	4	48	17	61	79	N/A	N/A	N/A	598	for projects under review. Does not preclude use of 10th edition ITE rates for purposes of environmental assessment.
3 - In Plan Check		Zone (E-O-PD-2) to allow renovations to existing building (add two stories). Requires Environmental Impact Report.	Commercial Office	screening room, 154,336 SF of office; 465 parking spaces		932	4.33	KSF	26	21	47	26	17	43	N/A	N/A	N/A	551	
4 - Permits Issued and/or Under Construction	250 N. Crescent Dr.	Development Plan Review, Density Bonus Permit, and Tentative Map request to construct a new 4-story, 8-unit condominium building with 1 very low income affordable unit, and development incentives for density, height, reduced modulation, reduced side setback, and reduced parking requirements.	Vacant Lot	Multi-Family Residential: 7 Condo Units, 1 Affordable Rental Unit, 12,400 SF residential uses; 14 parking spaces	3	230	8.000	DU	1	3	4	3	1	4	2	2	4	46	
5 - Completed (Operational, C of O Issued)	309-325 S. Elm Dr.	Tentative Tract Map, Density Bonus Permit, R-4 Permit, and Development Plan Review request to allow construction of a new condomismb alloffig, with development incentives for density, and increased height, and additional front yard paving.	Residential (3 multi- family buildings, one single-family residence, and one duplex) - 23 units, 28,306 SF, 36 parking spaces	Multi-Family Residential: 2 Buildings with a total of 30 Condo Units, 54,566 SF residential uses; 88 parking spaces	4	230	30.000	DU	2	11	13	10	6	16	8	6	14	174	
6 - Inactive (No Final Action)						310	169	Rooms	49	40	89	60	44	104	69	54	123	1381	
7 - Withdrawn, Expired, or Denied	55 N. La Cienega Blvd.	Overlay Zone for Mixed-Use Hotel Project, including hotel, restaurant, and market uses.	13,500 SF Restaurant (The Stinking Rose)	169 Hotel Rooms; ancillary restaurant (3,346 SF), market/eatery (9,566 SF) and retail uses (656 SF);	1	820	656	SF	5	4	9	11	12	23	17	16	33	29	
Added to List (Last Update March 2018)						931	-588	SF	3	1	4	4	2	6	4	3	7	53	
	154-168 N. La Peer Dr.	Tentative Tract Map, Development Plan Review, and R-4 Permit request to allow construction of a new condominium building.	Multi-Family Residential (3 buildings) - 6 units	Multi-Family Residential: 16 Condo Units, 39,084 SF residential uses; 59 parking spaces	4	230	16.000	DU	5	2	7	6	2	8	5	3	8	93	
	140 S. Laclay Delva	Development Plan Review, Conditional Use Permit, Open Air Dining, and Extended Hours Permit for new 4-story	3-story hotel -	4-story hotel - 36,718-SF with 66 rooms, 3,028 SF restaurant (1,628 SF indoor, and 1,400 SF outdoor), and	1	310	22.000	Rooms	9	7	16	8	8	16	Not Available	Not Available	20	197	
	140 S. Lasky Drive	hotel with 66 rooms, restaurant, and rooftop uses.	14,625 SF, 44 rooms	restaurant (1,026 5+ motor, and 1,400 5+ outdoor), and rooftop uses (pool), and 3 levels of subterranean parking	1	931	3.028	TSF	14	3	17	17	11	28	20	14	34	273	
	325 N. Maple Dr.	Development Plan Review request for addition of approximately 50,000 square feet of habitable office space within the existing post office building.	US Post Office Building: 14,000 SF retail center, 56,000 SF distribution center, 150,000 SF of parking for delivery trucks	Commercial: Addition of total of 47,347 5F of new office area to existing building, including 3,200 5F of retail/restaurant on the ground floor, 7,300 5F of retail service center for use by the LSP soci Office, and expansion of general office floor area; (increase from 56,430 SF to 103,777 SF); 297 parking spaces	4	710	50.000	TSF	68	9	77	13	62	75	10	10	20	550	
			Surface Parking Lot	Commercial Office with Retail/Restaurant: 6,900 SF of		710	13.300	TSF	18	2	20	4	16	20	3	2	5	146	
	9212 Olympic Blvd.	Etco Homes: Conditional Use Permit and Minor Accommodation request to allow a new 3-story office building in the C-3T-2 Zone.	associated with	Retail/Restaurant (with a max. of 1,000 SF of bar and dining area), 13,344 SF of Commercial Office; 58 parking spaces	4	933	1.000	TSF	35	28	63	27	25	52	28	26	54	716	
			(not a part)	spaces		814	4.700	TSF	15	17	32	14	10	24	12	12	24	206	

9	425 N. Palm Dr.	Cloud Condos: Zone Text Amendment, Development Plan Review, and R-4 Permit request to allow a new 5- story, 20-unit condimination building, including permission for changes to modulation requirements, rooftop bathrooms, and front yard paving.	Multi-Family Residential (3 buildings) - 18 Units	Multi-Family Residential: 20 Multi-Family Residential Units - 54,915 SF Total; 74 parking spaces	2	230	20.000	DU	2	7	9	7	4	11	5	3	8	110	
10	340 S. Rexford	Vesting Tentative Parcel Map, Development Plan Review, and R-4 Permit for a new 3-Unit Condo Building	Vacant Lot	3-Unit Condominium Building	1	232	3.000	DU	6	25	31	11	7	18	13	17	30	235	
11	370 N. Rodeo Dr.	Cartier: Development Plan Review and In-Lieu Parking request for a new 3-story commercial building.	9,587 SF Commercial (Retail)	Commercial (Retail): 15,250 SF of Retail Use (net increase of 5,663 SF)	1	814	5.663	KSF	19	21	40	16	13	29	58	58	116	251	Used Sunday average for Wkend
	9900-9908 S. Santa	Zone Change request to change from commercial to mixed use zoning, including changes to height, FAR, and	Vacant Lot (Friar's	Mixed-Use Multi-Family and Commercial: 13,036 SF of	1	230	27.000	DU	4	8	12	10	4	14	6	7	13	157	
12	Monica Blvd.	setbacks.	Club)	Commercial, 27 Condo Units	1	814	13.616	KSF	45	49	94	39	30	69	287	287	574	604	
		General Plan Amendment, Zoning Code Amendment for				230	21.000	DU	1	8	9	7	4	11	5	5	10	123	
13	8600 Wilshire Blvd.	an Overlay Zone, Zoning Map Amendment, Vesting Tentative Tract Map, Planned Development Permit, and Development Agreement request to allow a new mixed-	Vacant Lot and Commercial Building	Mixed-Use Multi-family and Commercial: 6,355 SF Retail; 18 Units; 3,412 SF Public Use; 82 parking spaces	4	820E	4.800	TSF	15	10	25	41	44	84	63	58	120	944	
		use multi-family and commercial building.				820R	2.500	TSF	-2	-1	η	-5	-5	-9	-6	-6	-12	-107	
14 9	9000 Wilshire Blvd.	Development Plan Review request for a new 3-story office building with rooftop lunchroom.	4,820 SF Commercial (Retail) and Surface Parking Lot	Commercial Office: 31,702 SF Commercial Office; 91 parking spaces	3	710	31.700	TSF	13	2	15	3	12	15	2	1	3	105	
		Zone Text Amendment and Planned Development Permit to amend the approved Planned Development		Mixed-Use Multi-family and Commercial: 54 Multi-		230	53.000	DU	4	20	23	19	9	28	13	12	25	311	
15	9200 Wilshire Blvd.		Vacant Lot	Family Residential Units, 14,000 SF Commercial; 321 parking spaces	3	820E	8.400	TSF	22	14	35	59	63	122	90	83	173	1357	
		commercial uses.				931	5.600	TSF	2	2	5	28	14	42	36	25	61	504	
	9876 Wilshire Blvd.	Beverly Hilton Revitalization Specific Plan request to	Hotel (The Beverly			310	-46.000	RMS	16	10	26	14	13	27	14	13	27	376	
16	(PHASE II - Condominium Building and	allow Condominium Building, Gardens, and conference center addition/modifications to the existing Beverly Hilton Hotel, with an overall decreased in the total	Hilton) - 739 Total Rooms in Interim before Phase II	140 Condo Units, 10 accessory staff units, 37,409 SF of Conference Center/Meeting Room Uses, 157,843 sf of landscaped gardens; Overall Hotel Rooms reduced to	2	230	140.000	DU	8	41	48	39	19	57	28	24	52	645	
•	Conference Center)	number of hotel rooms.	Completion	maximum 522 after completion of Phase II		931	5.000	TSF	2	2	4	25	12	37	32	22	54	450	
						820	5.000	TSF	16	10	26	42	45	87	64	59	123	969	
		One Beverly Hills: General Plan Amendment, Specific Plan Designation, Specific Plan, Vesting Tentative Tract		Mixed-Use (Condominium and Commercial): 193 Condo		310	134.000 193.000	RMS	13	38 52	85 65	56 45	43 28	99	187	167	352 64	1195 806	
17	9900 Wilshire Blvd.	Map, Development Plan Review, and Development Agreement request to allow two new Mixed-Use Condominium buildings with commercial uses, and	Vacant (Former Robinson's May Site)	Units with 134 Rooms, 16,057 SF of Restaurant/Retail, 7,942 SF of Ballrooms/Conference Rooms, 18,826 SF of Ancillary Uses, 1,140 parking spaces	3	820R-1	18.400	TSF	11	7	18	33	36	69	30	28	58	772	
		luxury public gardens.				932-1	14.200	TSF	65	14	79	80	48	128	90	63	153	1263	

### Appendix F

### Construction Level of Service Worksheets

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41∱	1>		¥	
Volume (veh/h)	1	883	1313	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	960	1427	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1427				1909	1427
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1427				1909	1427
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	472				60	125
Direction, Lane #	EB 1	EB 2	WB 1	SB 1		
Volume Total	321	640	1427	0		
Volume Left	1	0	0	0		
Volume Right	0	0	0	0		
cSH	472	1700	1700	1700		
Volume to Capacity	0.00	0.38	0.84	0.00		
Queue Length 95th (ft)	0	0	0	0		
Control Delay (s)	0.1	0.0	0.0	0.0		
Lane LOS	А			Α		
Approach Delay (s)	0.0		0.0	0.0		
Approach LOS				Α		
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utiliz	zation		84.4%	IC	U Level o	of Service
Analysis Period (min)			15			
			.5			

	-	•	•	•	<b>\</b>	<b>/</b>		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> ↑	20.1	*	<b>↑</b>	W			
Volume (vph)	869	19	71	1303	41	30		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	1.00	1.00			
Frt	1.00		1.00	1.00	0.94			
Flt Protected	1.00		0.95	1.00	0.97			
Satd. Flow (prot)	3008		1509	1588	1456			
Flt Permitted	1.00		0.29	1.00	0.97			
Satd. Flow (perm)	3008		453	1588	1456			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	945	21	77	1416	45	33		
RTOR Reduction (vph)	1	0	0	0	30	0		
Lane Group Flow (vph)	965	0	77	1416	48	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2		. 2	6	8			
Permitted Phases	<del>_</del>		6					
Actuated Green, G (s)	82.0		82.0	82.0	10.0			
Effective Green, g (s)	82.0		82.0	82.0	10.0			
Actuated g/C Ratio	0.82		0.82	0.82	0.10			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2466		371	1302	145			
v/s Ratio Prot	0.32			c0.89	c0.03			
v/s Ratio Perm			0.17					
v/c Ratio	0.39		0.21	1.09	0.33			
Uniform Delay, d1	2.4		2.0	9.0	41.9			
Progression Factor	1.00		0.19	1.35	1.00			
Incremental Delay, d2	0.5		1.0	50.5	1.4			
Delay (s)	2.9		1.4	62.6	43.3			
Level of Service	А		Α	Е	D			
Approach Delay (s)	2.9			59.5	43.3			
Approach LOS	А			Е	D			
Intersection Summary								
HCM 2000 Control Delay			37.4	Н	CM 2000	Level of Service	D	
HCM 2000 Volume to Capa	acity ratio		1.01					
Actuated Cycle Length (s)			100.0		um of lost		8.5	
Intersection Capacity Utiliz	ation		91.9%	IC	CU Level c	of Service	F	
Analysis Period (min)			15					
c Critical Lane Group								

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Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		41∱	1>		¥	
Volume (veh/h)	16	1354	956	40	4	25
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	1472	1039	43	4	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1083				1832	1061
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1083				1832	1061
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				93	88
cM capacity (veh/h)	640				66	220
Direction, Lane #	EB 1	EB 2	WB 1	SB 1		
Volume Total	508	981	1083	32		
Volume Left	17	0	0	4		
Volume Right	0	0	43	27		
cSH	640	1700	1700	166		
Volume to Capacity	0.03	0.58	0.64	0.19		
Queue Length 95th (ft)	2	0	0	17		
Control Delay (s)	0.8	0.0	0.0	31.6		
Lane LOS	Α			D		
Approach Delay (s)	0.3		0.0	31.6		
Approach LOS				D		
Intersection Summary						
Average Delay			0.5			
Intersection Capacity Utiliz	ation		71.9%	IC	U Level o	of Service
Analysis Period (min)			15			
J. 1 - 2 ()						

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Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	<b>↑</b> ↑	20.1	ሻ	<u></u>	W			
Volume (vph)	1301	26	49	949	59	56		
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620		
Total Lost time (s)	4.0	.020	4.0	4.0	4.0	.020		
Lane Util. Factor	0.95		1.00	1.00	1.00			
Frt	1.00		1.00	1.00	0.93			
Flt Protected	1.00		0.95	1.00	0.98			
Satd. Flow (prot)	3009		1509	1588	1447			
Flt Permitted	1.00		0.16	1.00	0.98			
Satd. Flow (perm)	3009		255	1588	1447			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	1414	28	53	1032	64	61		
RTOR Reduction (vph)	1	0	0	0	38	0		
Lane Group Flow (vph)	1441	0	53	1032	87	0		
Turn Type	NA		Perm	NA	Prot			
Protected Phases	2			6	8			
Permitted Phases			6	-	_			
Actuated Green, G (s)	80.6		80.6	80.6	11.4			
Effective Green, g (s)	80.6		80.6	80.6	11.4			
Actuated g/C Ratio	0.81		0.81	0.81	0.11			
Clearance Time (s)	4.0		4.0	4.0	4.0			
Vehicle Extension (s)	0.2		0.2	0.2	3.0			
Lane Grp Cap (vph)	2425		205	1279	164			
v/s Ratio Prot	0.48			c0.65	c0.06			
v/s Ratio Perm			0.21					
v/c Ratio	0.59		0.26	0.81	0.53			
Uniform Delay, d1	3.6		2.4	5.4	41.8			
Progression Factor	1.00		0.22	0.90	1.00			
Incremental Delay, d2	1.1		2.8	5.1	3.1			
Delay (s)	4.7		3.3	9.9	44.8			
Level of Service	А		Α	Α	D			
Approach Delay (s)	4.7			9.6	44.8			
Approach LOS	Α			Α	D			
Intersection Summary								
HCM 2000 Control Delay 8.6		8.6	Н	CM 2000	Level of Service	 Α		
HCM 2000 Volume to Capa	icity ratio		0.78					
Actuated Cycle Length (s)	-		100.0	S	um of lost	time (s)	8.5	
Intersection Capacity Utiliza	ation		73.1%		CU Level o		D	
Analysis Period (min)								
c Critical Lane Group								

# Appendix G TDM Strategy Details

#### APPENDIX G TDM STRATEGY DETAILS

On-site Wayfinding & Signage				
Description:	olicable to developments on sites greater than 2.5 acres in size. Provide directional signage and/or wayfinding to locate nearby transportation services and amenities (e.g. transit stops and bicycle routes).			
	Provide multimodal wayfinding and signage at main entrances and/or at key decision points.			
Standards:	Wayfinding and signage should be located externally/internally to direct users to transportation services and infrastructure, including but not limited to transit, bikeshare, carshare, bike parking and amenities, ride-hailing, taxi/shuttle/carpool/vanpool pick-up/drop-off locations.			
	Wayfinding and signage shall meet City standards.			
Monitoring & Reporting:	City staff should confirm installed wayfinding meets design requirements noted above during a pre-occupancy inspection of the site. The property owner should include photos of wayfinding demonstrating that all signage is in place, up to date, properly maintained, and visible to tenants/residents upon submittal of their annual TDM Reporting Update.			
	Establishing a wayfinding system throughout a project site, or near key access points, provides clear directions to key destinations and encourages the use of implemented TDM amenities. CAPCOA does not specifically quantify the trip reduction benefits of wayfinding and signage, as it has little impact when implemented alone.			

Real-Time Multimodal Information	
Points:1	
	Provide monitors that display travel options and real-time transit schedules (e.g. transit screens, TNC wait times, bikeshare availability). Should be located in highly visible locations such as building entrances and hotel lobbies.
Standards:	Provide at least one real-time display at highly visible location.
	Display should be curated by location and show nearby stops, travel time for different transportation modes and options, and transit schedules.
	Transportation options include, but are not limited to: train, bus, personal bike, bikeshare, walking, ride-hailing service (Uber/Lyft), carshare, and private shuttles.
Monitoring & Reporting:	City staff should confirm that the installed display(s) meet design requirements noted above during a pre-occupancy inspection of the site. The property owner should include current photos of the display to demonstrate that all components are in place, properly maintained, and visible to tenants/residents upon submittal of their annual TDM Reporting Update.
	Real-time information displays support on-the-go decision-making and help to mitigate reliability concerns with alternative modes. CAPCOA does not specifically quantify the trip reduction benefits of wayfinding and signage, as it has little impact when implemented alone.

Bike Repair Station	
Points:1	
Description:	Provide an on-site bicycle repair station with adequate tools that is publicly accessible, visible, and located at ground level.
Standards:	Install bicycle repair stations to allow for basic repair with a bicycle pump, screwdrivers, wrenches, and hex tools.
	Locate at ground level, weather-protected, well-lit, easy-to-find areas near bicycle parking and building entrances.
Monitoring & Reporting:	City staff should confirm that the installed repair station(s) meet design requirements noted above during a pre-occupancy inspection of the site. The property owner should include up-to-date photos of the repair station(s) demonstrating that all tools are in place, properly maintained, and accessible to tenants/residents upon submittal of their annual TDM reporting update.
Justification:	On-site repair stations support the ongoing use of bicycles as a reliable mode of alternative transportation. CAPCOA does not specifically quantify the trip reduction benefits of repair stations, as they have little impact when implemented alone.

Guaranteed Ride Home				
Points:2				
Description:	Offer non-drive alone commuters free rides home in event of an approved emergency. Can be provided through LA Metro's Guaranteed Ride Home Program which offers up to two rides per 12-month period.			
Standards:	Provide full reimbursements for qualified trips home to employees who commute to/from work by biking, taking public transit, or carpooling at least one day of the week.			
	Valid emergencies include personal illness/emergencies, family illness/emergency, unplanned overtime, inclement weather, and mechanical problems.			
	Provide at least 2 free rides in a 12-month period, and up to \$3.50 per mile.			
	Set a cap to discourage commuters from abusing the program and relying on it as a secondary commute mode.			
	Provide reimbursements for taxis, ride-hailing services (Uber/Lyft), company vehicles, and transit.			
	Can be implemented internally or through Metro's Guaranteed Ride Home program.			
Monitoring & Reporting:	Employers should designate a representative to ensure that employees do not exceed their maximum number of free rides/per mile subsidies within the 12-month period. Employees should submit receipts detailing the transportation mode, mileage, and total cost. Provide written policy to City as part of the annual report.			
Justification:	Provides a way for employees who commute to work by transit, carpool, vanpool, biking, or walking to travel home when an unexpected need arises (such as a personal emergency or unscheduled overtime). CAPCOA calculates a trip reduction ranging from 1.0 – 6.2% for Guaranteed Ride Home programs when it is part of a larger group of commute trip strategies.			

Rideshare Matching Points:2		
Description:	Facilitate carpooling by investing in a platform or database that matches potential riders. Can be implemented through the Director or through a private operator such as Scoop or RideAmigos.	
Standards:	Provide a rideshare matching service to identify potential carpool partners; dynamic rideshare options may be suitable if encouraged for all participants. Ridesharing shall mean the use of a private vehicle to facilitate prearranged rides between residents, visitors, or employees within similar trip origins and destinations. Rideshare can be facilitated through a trip coordinator or with web or mobile based applications.	
	implement internally or through a third-party operator such as Scoop or RideAmigos.	
	Partners can be matched during new hire orientation, a company-wide survey, and/or on-demand.	
Monitoring & Reporting:	The property owner should submit copies of invoices for a ride matching platform and provide any informational materials distributed that describe the program during submittal of their annual TDM reporting update.	
Justification:	Rideshare matching eases the burden of locating carpool partners by connecting employees who live and work in close proximity and have similar work hours. Rideshare matching falls under Commute Trip Reduction Programs, which CAPCOA calculates a VMT reduction of 1-6.2%.	

Delivery Amenities					
Points:2					
Description:	cilitate delivery services by providing a staffed reception desk, delivery lockers, or other delivery amenity.				
	Facilitate delivery services by providing one of the following areas to receive deliveries:				
	- Staffed reception desk				
Standards:	-Delivery lockers				
	-Temporary storage for deliveries				
	-Temporary refrigeration of grocery deliveries				
	-Other delivery supportive areas as proposed by the property owner.				
Monitoring & Reporting:	The City should confirm the installation of the aforementioned amenities during a pre-occupancy inspection of the site. The property owner should include up to date photos of the amenities demonstrating that all components are properly maintained and accessible to tenants/residents upon submittal of their annual monitoring and reporting update.				
Justification:	May reduce VMT through reducing the number of trips, such as shopping, that may otherwise have been made by a single occupant vehicle and reduces trip by delivery vehicles. CAPCOA does not specifically quantify the trip reduction benefits of delivery support amenities, as they have little impact when implemented alone.				

Bike Racks Points:2	
Description:	Provide on-site bike parking that is double the amount required by the Municipal Code 19.28.150. Can be provided via a combination of bike racks and secure bike storage if desired. The Director is available to advise on more detailed design and siting considerations to ensure that bicycle facilities are placed and designed to ensure high visibility and usage.
Standards:	Provide bike parking that is double the amount required by the Municipal Code 19.28.150. Can be provided via a combination of bike racks and secure bike storage if desired.
	Locate bike racks at well-lit, easy-to-find areas nearby bike facilities and building entrances and at grade.
	The Director is available to advise on more detailed design and siting considerations to ensure that bicycle facilities are placed and designed to ensure high visibility and usage.
Monitoring & Reporting:	The City should confirm that the installed spaces meet the design requirements stated above during a pre-occupancy inspection of the site. The property owner should include up to date photos of the bicycle parking demonstrating that the spaces are in good condition and accessible during annual reporting.
Justification:	CAPCOA does not specifically quantify the trip reduction benefits of bicycle parking; however, it is included as a supporting element of "Improved Design of Development," which has a calculated trip reduction of 3.0-21.3%. The Center for Clean Air Policy (CCAP) Guidebook attributes a 1%-5% VMT reduction to the overall use of bicycles, of which 0.625% can be attributed to bicycle parking.

Secure Bike Storage					
Points:2					
Description:	Provide secure and long-term bike parking on-site via a secure bike room or ground floor lockers. Provide at least 1 space per 3,000 sq. ft. of floor area, with a minimum of 4 spaces. Establish a building policy to permit bicycles in elevators.				
Standards:	Provide at least one space/ 3,000 sq. ft. of floor area, with a minimum of four spaces.				
	Establish a building policy to permit bicycles in elevators.				
	Locate bike parking at weather-protected, well-lit, easy-to-find areas nearby bike facilities and building entrances and at grade where possible.				
	Install signage to increase awareness of the facility among site users.				
Monitoring & Reporting:	The City should confirm that the installed spaces meet the design requirements stated above during a pre-occupancy inspection of the site. The property owner should include up to date photos of the bicycle parking demonstrating that the spaces are in good condition and accessible during annual reporting.				
Justification:	CAPCOA does not specifically quantify the trip reduction benefits of bicycle parking; however, it is included as a supporting element of "Improved Design of Development," which has a calculated trip reduction of 3.0-21.3%. The Center for Clean Air Policy (CCAP) Guidebook attributes a 1%-5% VMT reduction to the overall use of bicycles, of which 0.625% can be attributed to bicycle parking.				

On-Site Bike Share Hub Points:2					
Description:	Sponsor or provide a WeHo Pedals Bike Share hub on site. If the City determines the location is not a good site or expansion is not possible at that time, a private bike share fleet may be provided.				
	When possible, if bikeshare stations are not located nearby, negotiate with the City Bikeshare representative for on-site placement of stations in convenient, publicly accessible locations.				
Standards:	When not a viable option, property owners and managers can provide on-site bikeshare themselves or through a third-party vendor.				
	Shared bikes should be branded and marketed to increase visibility.				
	City staff should confirm the provision of the shared bicycles during a pre-occupancy inspection of the site. The property owner should include up to date photos of the bicycles demonstrating that all components are properly maintained and accessible to tenants/residents upon submittal of their annual TDM reporting update.				
	Provides a flexible alternative to driving alone at places of work and residential buildings. While unlikely to serve as a means of commuting, onsite loaner bicycles offer a viable alternative for midday trips such as lunch or meetings at offices and for errands at residential sites. CAPCOA does not specifically quantify the trip reduction benefits of loaner bicycles, as they have little impact when implemented alone.				

Preferential Parking	
Points:2	
Description:	Designate the most desirable parking spaces for carpools and vanpools. Requires ongoing enforcement to be effective.
	Provide preferential parking at the following rates:
Standards:	-Carpool/vanpool: 2% of all parking spaces.
	Post or mark parking spaces clearly as carpool or vanpool use only.
	Identify preferential locations, such as the first (or most convenient) level within parking structures and spaces closest to building entrances (after ADA spaces).

Pair with enforcement to monitor use and compliance; adjust total quantities of spaces needed annually.
Assign parking permits and monitor the occupancy rate to determine whether sufficient levels of preferential parking are being provided. Property owners should employ parking enforcement officers to ensure spaces are solely being used by carpool and vanpool users. Provide documentation to City during annual reporting.
Reserving parking spaces near building entrances and other desirable locations for carpool and vanpool vehicles encourages people to share rides to work. CAPCOA calculates a trip reduction ranging from 1.0 – 6.2% for preferential parking for carpools and vanpools.

EV Chargers and Preferential Parking		
Points:2	Points:2	
Description:	Designate the most desirable parking spaces for electric vehicles (EVs) and provide charging stations. Requires ongoing enforcement to be effective.	
Standards:	For development required to provide Electric Vehicle Charging per Zoning Ordinance, West Hollywood Municipal Code, provide double the EV preferential parking and chargers (1 charger per space) for electric vehicles.	
	Post or mark parking spaces clearly as EV use only.	
	identify preferential locations, such as the first (or most convenient) level within parking structures and spaces closest to building entrances (after ADA spaces).	
	Pair with enforcement to monitor use and compliance; adjust total quantities of spaces needed annually.	
Monitoring & Reporting:	Property owners should employ parking enforcement officers to ensure spaces are solely being used by EV vehicles. Provide documentation to City during annual reporting.	
Justification:	Reserving parking spaces near building entrances and other desirable locations for carpool and vanpool vehicles encourages people to share rides to work. CAPCOA calculates a trip reduction ranging from 1.0 – 6.2% for preferential parking for carpools and vanpools.	

Carshare Parking Points:3	
Description:	Designate parking for carshare vehicles in convenient and publicly accessible area with spaces clearly marked as carshare only. This strategy is available to all but particularly recommend for new development projects.
Standards:	Post or mark parking spaces clearly as carshare only at the following rates:  - A minimum of one carshare parking space per site; and  - One carshare parking space per 20,000 Occupied Floor Area.  Assign carshare spaces by converting existing parking spaces or in convenient and publically accessible areas.
Monitoring & Reporting:	City staff should confirm that the numbers of required spaces are provided during a pre-occupancy inspection of the site. The property owner should include up-to-date photos of the carshare spaces and any accompanying signage to demonstrate that they are in good condition and accessible to tenants/residents in the submittal of their annual TDM reporting update.
Justification:	Carshare enables people to forego car ownership and thereby drive less overall. Providing onsite carshare parking increases program accessibility. CAPCOA calculates a VMT reduction of 0.4-0.7% for carshare programing.

Carshare Membership	
Points:3	
Description:	Offer fully subsidized annual carshare memberships. For developments, the strategy can be accomplished by providing one year of a fully subsidized carshare membership. Recommended to be combined with carshare parking for maximum effectiveness.
Standards:	Provide a carshare subsidy to cover at least 50% of monthly carshare membership fees.
	Establish a business account with a third party vendor and purchase memberships for employees who wish to carshare.
	If carshare vehicles are not located within walking distance of the site, negotiate with the vendor for on-site placement of vehicles in convenient, publicly accessible locations.
Monitoring & Reporting:	The property owner should submit copies of invoices for carshare memberships and any informational materials that describe available carshare benefits that have been provided to employees/residents during submittal of their annual TDM reporting update.
Justification:	Carshare enables people to forego car ownership and thereby drive less overall. CAPCOA calculates a VMT reduction of 0.4-0.7% for carshare programing.

Price Parking	
Points:3	
Description:	Applicable to any facility that offers private parking. Charge for parking by setting a minimum price per hour or per day. For residential uses, utilize the unbundled parking strategy.
Standards:	Determine pricing based on optimal occupancy during peak periods (85%).
Monitoring & Reporting:	The property owner should submit copies of all informational materials about parking pricing and current rates as part of their annual TDM reporting update. Conduct bi-annual parking occupancy analysis to evaluate program effectiveness.
Justification:	Pricing parking at or above market rates provides a clear signal to employees to consider shifting to alternate modes. Workplace parking pricing is most effective when nearby on-street spaces are priced at market rates or regulated with residential parking permits. CAPCOA calculates a VMT reduction of 0.1-19.7% for parking cash out.

Bike Share Membership	
Points:3	
Description: Offer a fully subsidized WeHo Pedals/Bikeshare Connect membership as an option to employees, residents and/or visitors.	
Standards:	Determine pricing based on optimal occupancy during peak periods (85%).
	Establish a corporate account with WeHo Pedals/Bikeshare Connect to purchase memberships for employees, residents, and visitors who wish to use bikeshare.
	If bikeshare stations are not located nearby, negotiate with the vendor for on-site placement of stations in convenient, publicly accessible locations.

Monitoring & Reporting:	The property owner should submit copies of invoices for WeHo Pedals memberships and any informational materials describing available bike share benefits provided to employees/residents during submittal of their annual monitoring and reporting update.
Justification:	Bikeshare provides flexibility and options for existing cyclists while introducing bicycling as a viable form of transportation to new users. CAPCOA does not specifically quantify the trip reduction benefits of bike share, as it has little impact when implemented alone.

Telecommuting Points:4	
Description:  Provide telecommute and/or flexible schedule options for employees, with the exception of temporary, contracted, and seasonal employees.	
Standards:	A site is eligible for this strategy if 10% of employees or more could potentially access this policy based on their job requirements.
	Adopt an official telecommute and/or flexible schedule policy allowing employees to:
	- Telecommute at least 1.5 days per week and/or
	- Work compressed work weeks outside of the traditional five eight-hour days per week (i.e. 9/80, 4/40).
	Document telecommuting and/or flexible schedule policy and enrollment figures in the annual report.
Monitoring & Reporting:	Conduct an annual survey to determine how many employees are partaking in flexible work schedules and use the data to track popularity each year.
Justification:	Telecommuting and flexible schedules allows employees to commute less frequently or during off-peak times. CAPCOA calculates a trip reduction ranging from 0.07 – 5.50% for flexible work arrangement programs.

/anpool, Shuttle, or Microtransit Program Points:4	
Description:	Offer private vanpool, shuttle, or microtransit services to employees or other site users. Can be achieved by partnering with other employers or entities. For example, providing connections to nearby rail stations.
	Limit vanpools to groups of five to 15 employees.
Standards:	Vanpool members should regularly travel together no less than 30 roundtrip miles at least 13 days each month.
	Riders typically pay a monthly fare and maintenance fee, while drivers ride at a discounted rate in exchange for driving and maintaining the van.
	Vans can be owned/leased by employers, employees, or third-party operators.
	Provide a vanpool subsidy to cover at least 50% of monthly vanpool expenses which can include vanpool fare, insurance, fuel, or maintenance.
	Implemented internally, through the Metro Vanpool Program, or third-party operator.
Monitoring & Reporting:	The property owner should submit copies of invoices for vanpool expenses and any informational materials distributed that describe the program during submittal of their annual TDM reporting update.
Justification:	Vanpooling is a proven and effective means of reducing commuter trips. CAPCOA groups vanpool programs with shuttle programs for a combined calculated VMT reduction of 0.3-13.4%.

Employee Parking Cash-Out Points:4	
Description:	Applicable to new developments and employers. If parking is leased, give employees the option to receive the full cash value of the space in lieu of parking. If parking is not leased, the cash-out can be equal to or more than the lowest monthly parking rate at the nearest public parking facility as identified at time of annual submission.
Standards:	Offer to employees who receive free or subsidized parking.
	Cash-out amounts vary by office and the amount paid per parking space.
	Can be applied to employers who lease or own their parking supply.
Monitoring & Reporting:	The property owner should submit copies of all informational materials about cash out and current rates for all employers at the site as part of their annual TDM reporting update.
	Parking cash-out allows employees to forgo subsidized or free workplace parking in exchange for the cash equivalent of the cost of the space covered by the employer. Like unbundling, cash out can be an extremely effective strategy as it helps to highlight the true cost of parking and provides financial incentive to shift to, or maintain use of alternative modes. CAPCOA calculates a VMT reduction of 0.6-7.7% for parking cash out.

Unbundled Parking Points:4	
Description:	Detach the cost of parking from rents or leases. Affordable units should unbundle parking rates proportional to the unit cost.
	Lease parking spaces separately so tenants only pay for the number of desired parking spaces.
Standards:	Property owners must be able to lease or sell excess parking spaces.
	City staff should regulate nearby on-street parking to avoid potential spillover issues from residents and employees using on-street parking to avoid paying for parking.
	Charge affordable units for parking in proportion to the cost of the unit.
Monitoring & Reporting:	The property owner should submit copies of all informational materials about unbundled parking and current parking rates as part of their annual TDM reporting update.
Justification:	Unbundling separates parking from property costs and requires those who wish to access a parking space to do so at an additional marginal cost. Unbundling is one of the most effective methods of discouraging single-occupant vehicle (SOV) travel as it reflects the true cost of parking, which is usually "hidden" in rents. CAPCOA calculates a VMT reduction of 2.6-13% for unbundling parking.

#### Showers & Lockers

Points:4	
Description:	Applicable to commercial and mixed use projects. Provide showers and lockers on-site for employees.
Standards:	Provide shower facilities and lockers for employees or other visitors to secure and store clothing and personal items – at least one showers and at least six lockers for every 30 bike parking spaces.
	City staff should confirm that the changing facilities meet design requirements stated above during a pre-occupancy inspection of the site. The property owners should include up-to-date photos of the changing facilities demonstrating that the showers and lockers are in good shape and accessible to tenants during submittal of their annual TDM reporting update.
Justification:	Providing showers and lockers encourages employees to walk and bike to work, especially for employees that ride longer distances or have concerns about arriving to work sweaty from a bike ride. A policy brief from the California Air Resources Board cites studies in which end of trip facilities, including showers at work places, increase the perceived comfort of bicycling and encourage shifts from other modes. CAPCOA calculates a VMT reduction of 5.4-6.2% for providing showers and lockers.

Transit Subsidies Points:5	
Description:	Provide a transit subsidy equal to at least 50% of a monthly transit pass (i.e. Metro BTAP) to all residents and/or employees on site. Can be provided via a BTAP pass or a stored value on a TAP card.
Standards:	Provide a monthly transit subsidy to cover at least 50% of monthly transit fares.
	Distribute pass subsidies on a monthly, quarterly, or annual basis by providing preloaded TAP cards or using a third-party transit benefits vendor.
	Offer pass subsidies to all employees and/or residents, regardless of primary commute mode, to encourage using transit as a primary or secondary choice.
Monitoring & Reporting:	Business/property owners should include copies of invoices for transit pass contributions and any informational materials that describe available transit benefits that have been provided to employees/residents in the submittal of their annual TDM reporting update.
Justification:	Subsidized transit passes provide a strong incentive to utilize transit and may be the catalyst for some residents or employees to forgo vehicle ownership entirely. CAPCOA calculates a VMT reduction of 0.3-20.0% for transit subsidies.

Commuter Incentives Po	
Description:	Applicable to employees who do not receive free parking at work. Provide a monetary incentive of at least \$30 per month for employees who commute to work via sustainable modes (i.e. walk, bike, transit, carpool/vanpool, or low-emission vehicle).
Standards:	Provide a direct cash incentive for each non-drive alone commute trip (i.e. walk, bike, transit, carpool/vanpool, or low-emission vehicle).
	The total value of incentives should be at least \$30 per participant, per month, or \$360 annually.
	May also incorporate shared Transportation Network Company services (e.g. UberPOOL or LyftLine) only for trips to and from a Metro/bus hub and pending confirmation of the ability to geofence and ensure ridesharing.
Monitoring & Reporting:	Business owners should document the total number of employees and/or visitors that were provided with incentives for non-drive alone trips within the year. If no employees or visitors have opted to receive the incentive, the business owners should submit documentation showing that incentives were offered and declined.
Justification:	Incentivizing alternative modes and shared rides can dissuade drive alone commuting. CAPCOA does not specifically quantify the trip reduction benefits of commuter incentives; however, this is similar to providing a parking cash-out, which has a calculated VMT reduction of 0.6-7.7%.

On-Site Daycare	
	Points:5
Description:	Provide childcare services on-site through a licensed daycare provider. Preference should be given to those who live or work on-site.
Standards:	include an on-site childcare facility through a licensed daycare provider that complies with all state and City requirements, including provisions within the West Hollywood Municipal Code. Enrollment preference should be given to on-site employees and residents.
Manitaring & Banartings	Before construction the developer/property owner should identify the location of the childcare space and submit plans for City staff to ensure that the facility will meet any applicable State and City requirements. Department of City Planning staff should confirm the constructed facility meets the specifications of approved plans during a pre-occupancy inspection of the site. The property owner should submit a letter from the contracted childcare provider that includes a description of the facility's operations (days of week and hours of operation, level of enrollment, etc.) and contact information of all applicable parties upon submittal of their annual monitoring and reporting update.
Justification:	Provision of on-site childcare may reduce VMT related to drop-off/pick-ups of children, in addition to making it easier for parents and caregivers to shift their daily commutes to other modes. CAPCOA does not specifically quantify the trip reduction benefits of on-site childcare, as no literature on its effects was identified.

Innovative Measures	
	Points:1-5
	Innovation is encouraged. Other strategies may achieve similar effects, ranging from emerging technology-based initiates to physical features that enhance walkability. To achieve this strategy, propose your concept to the Director to receive confirmation of its applicability and point value.
	Trip Reduction Potential: The potential reduction should be proven to reach the drive-alone mode share, or AVR, target set for the development. Average vehicle ridership or AVR shall mean the total number of people that arrived at a site on the given day of observation, divided by the number of vehicles trips into or out of the site during the defined peak period of 6 a.m. to 10 a.m. in the morning and 3 p.m. to 7 p.m. in the evening.
Monitoring & Reporting:	As part of the annual reporting, information must be included to show the overall effectiveness, use, and impact of user satisfaction of any "innovation" strategy implemented as part of a TDM program.