AVENUE OF FLAG SPECIFIC PLAN
BUELLTON, CALIFORNIA

REVISED TRAFFIC AND CIRCULATION STUDY

July 10, 2017

ATE #17026

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REVISED TRAFFIC AND CIRCULATION STUDY FOR THE AVENUE OF FLAGS SPECIFIC PLAN, BUELLTON, CALIFORNIA

Associated Transportation Engineers (ATE) is pleased to submit this revised traffic and circulation study for the Avenue of Flags Specific Plan. The study examines existing and future traffic conditions within the study area; and assesses potential traffic impacts associated with the specific plan. It is our understanding that the results of the study will be incorporated into the environmental documents being prepared by the City of Buellton.

We appreciate the opportunity to assist the City of Buellton with this project.

Associated Transportation Engineers

Richard L. Pool, PE
President

REGISTERED PROFESSIONAL ENGINEER
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INTRODUCTION

The following study contains an analysis of potential traffic and circulation impacts associated with the Avenue of Flags Specific Plan (the "Specific Plan") proposed in the City of Buellton. The study provides information relative to existing and future conditions. The purpose of this study is to identify potential impacts associated with the Project for the City to use in the environmental review process.

PROJECT DESCRIPTION

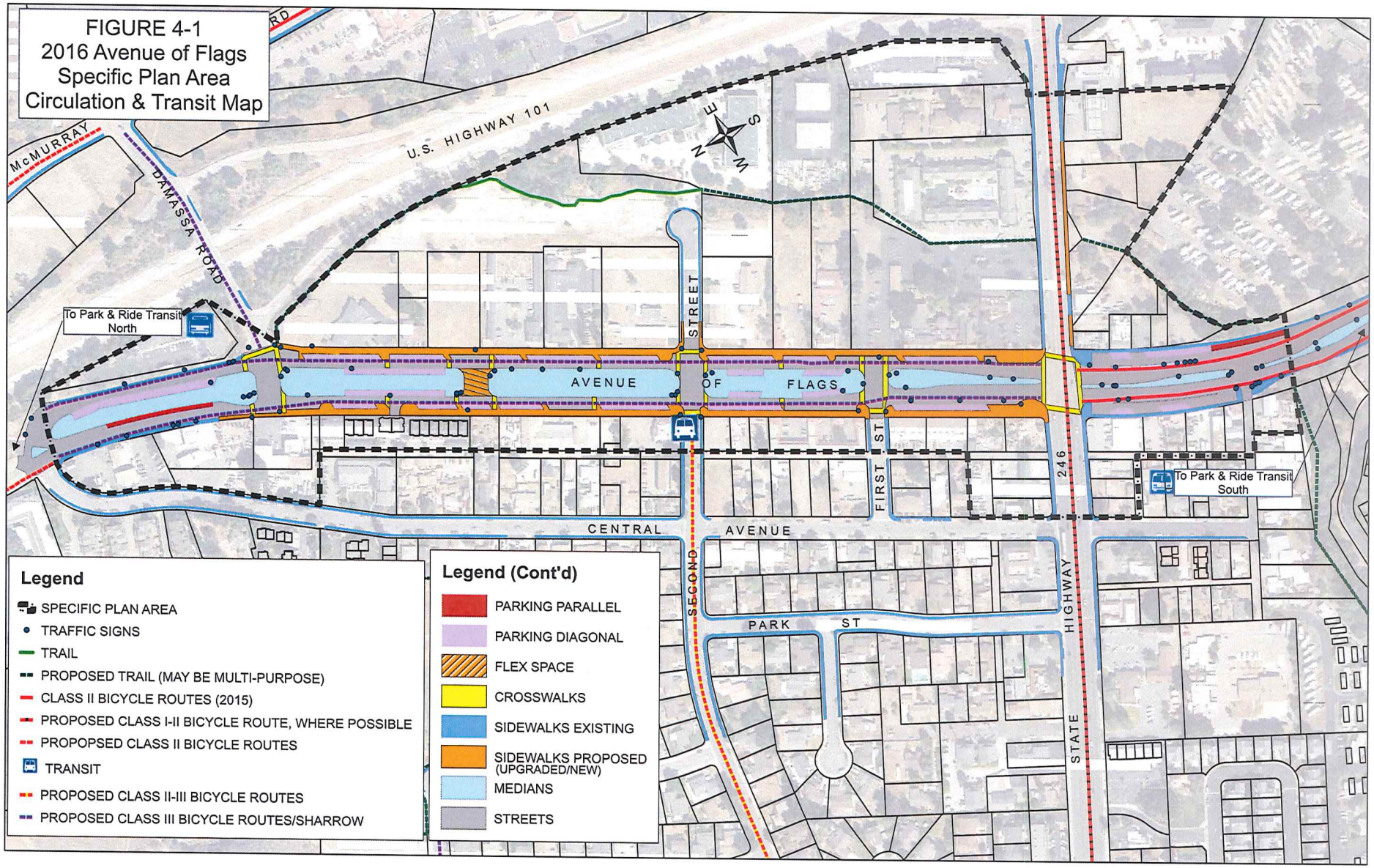
The Specific Plan encompasses the Avenue of Flags roadway and the properties adjacent to Avenue of Flags that are located north and south of SR 246. Figure 1 illustrates the Specific Plan area as well as the circulation system proposed for the Specific Plan area. The Specific Plan is intended to transform the Avenue of Flags area into a vibrant downtown that serves the community. The fundamental strategy in revitalizing downtown Buellton is the transformation of the Avenue of Flags corridor from an aging automobile-oriented thoroughfare to a vibrant, pedestrian friendly "main street", with a welcoming village atmosphere that preserves Buellton's history and captures the character of the community. The Avenue of Flags current "pass-through" traffic status will be changed to a condition of being a major destination for community residents and travelers alike. This will be accomplished by: activating the medians, calming traffic, enhancing safety for pedestrian via crosswalks and pathways, strategic building massing, providing parklike improvements, and creating destination places on the medians and along the adjacent roadway frontages. Additional parking is also being proposed in the Specific Plan area, including both angled and parallel parking along Avenue of Flags.

Future development with the Specific Plan area would be regulated under form based code regulations, parking requirements, architecture, signage standards, and allowable land uses for the Specific Plan area. Unlike conventional zoning which focuses on land use that tends to create homogenous zoning areas, form based code encourages diversity through a mixture of uses, form, architectural styles, and scale. A mixture of building types and uses is encouraged: residential above commercial, a live-work unit, and offices above mercantile can all be next to each other on the same street, block, or even parcel of land. The Specific Plan show that an additional 163 residential units and about 75,000 SF of commercial space could be accommodated in the Specific Plan area when compared to the potential development under the existing General Plan.

EXISTING CONDITIONS

Existing Street Network

The circulation system that serves the Specific Plan is comprised of regional highways, arterials and collector streets, which are illustrated on Figure 2. The following text discusses the major roadways that serve the Specific Plan.



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SPECIFIC PLAN AREA CIRCULATION MAP

FIGURE 1

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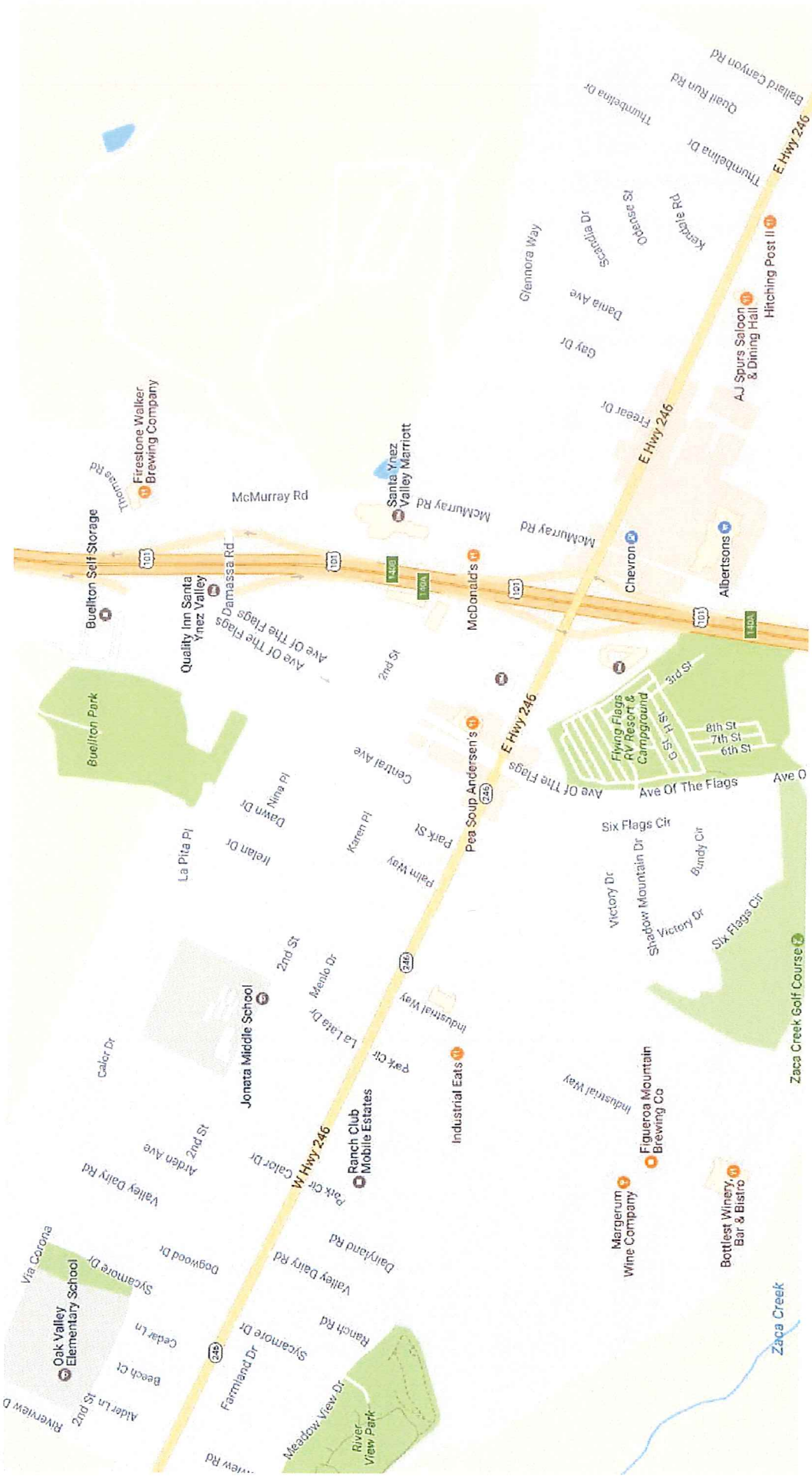

FIGURE 2

EXISTING STREET NETWORK

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US 101, located along the east side of the Specific Plan, is a multi-lane highway that serves the California coast between Los Angeles and San Francisco. US 101 is 4 lanes wide in the City of Buellton and provides regional access to the Specific Plan area. The US 101 Southbound Off-Ramp that connect directly to the north end of Avenue of Flags and the US 101/Damassa Road interchange provide regional access for the northern portion of the Specific Plan. The US 101/SR 246 interchange provides regional access for the southern portion of the Specific Plan.

SR 246, which bisects the Specific Plan, is an east-west California state highway that extends easterly from the Pacific Ocean west of Lompoc through Buellton, Solvang and Santa Ynez. SR 246 is a 4-lane arterial from the Buellton city limit on the west to Freear Drive near the Buellton city limit on the east.

Avenue of Flags, the main artery which serves the Specific Plan area, is a north-south roadway that parallels the west side of US 101. Avenue of Flags serves the business area of Buellton between the US 101 SB Off-Ramp on the north and the Flying Flags RV Resort on the south. Avenue of Flags is a divided roadway within the Specific Plan. North of SR 246, Avenue of Flags contains one northbound lane from SR 246 to Damassa Road and two northbound lanes north of Damassa Road. Avenue of Flags contains 1 southbound lane between the US 101 SB Off-Ramp and SR 246. South of SR 246. Avenue of Flag contains 2 lanes in each direction south of SR 246 within the Specific Plan.

McMurray Road is a north-south collector street that parallels the east side of US 101. McMurray Road serves commercial, industrial, and residential uses.

Central Avenue is a north-south collector street that parallels the west side of the Specific Plan. Central Avenue serves residential and commercial uses.

Second Street is an east-west collector street that bisects the Specific Plan. Second Street extends westerly from just west of US 101 to Riverview Drive. Second Street serves commercial and residential uses within the Specific Plan area and residential uses west of the Specific Plan.

First Street is an east-west local street that extends between Avenue of Flags and Central Avenue. First Street serves commercial uses and residential uses.

Existing Levels of Service

"Level of Service" (LOS) A through F are used to rate traffic operations, with LOS A indicating very good operating conditions and LOS F indicating poor conditions. Table 1 describes the level of service grades for rating traffic operations.

Table 1
Level of Service Grades

LOS	Definition
A	Conditions of free unobstructed flow with little or no delay.
B	Conditions of stable flow with very little delay.
C	Conditions of stable flow with delays low to moderate.
D	Conditions approaching unstable flow with moderate to heavy delays.
E	Conditions of unstable flow with significant delay.
F	Conditions of forced flow with volumes well above capacity.

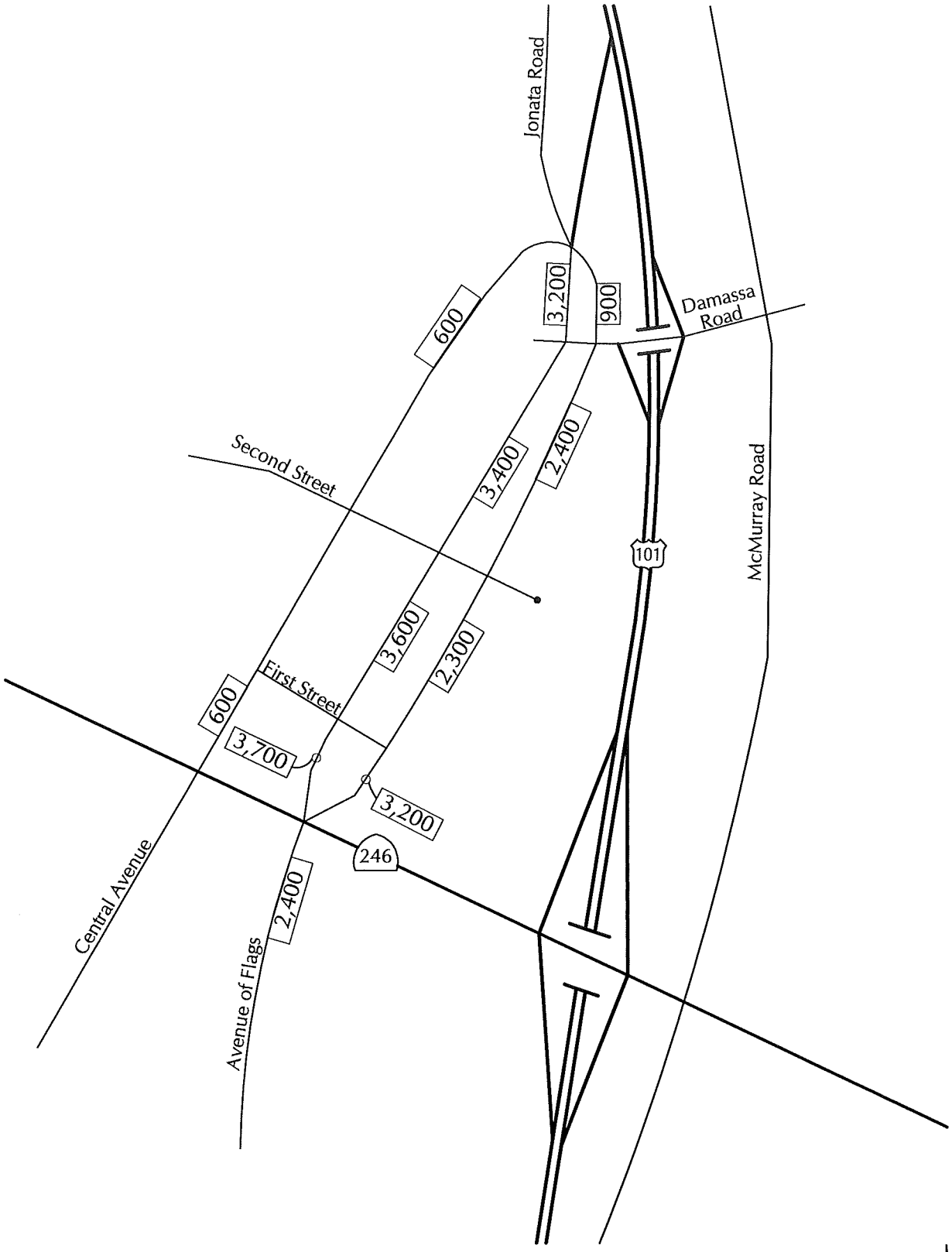
The City of Buellton considers LOS C are the standard for traffic operations on City roadways and intersections. LOS D is considered acceptable as an interim condition where programmatic implementation of transportation infrastructure improvements are planned to take place over a period of time that would return the level of service to an acceptable level.

Traffic counts were collected in March 2017 to document Existing Conditions (traffic counts are contained in the Technical Appendix for reference). Figure 3 illustrates the Existing Average Daily Traffic (ADT) volumes for the downtown core area. As shown, traffic volumes range from 900 to 3,700 ADT on the segments of Avenue of Flags in the downtown core. These relatively low volumes represent LOS A-B operations (little or no delay).

Since traffic flow on street networks is most constrained at intersections, detailed traffic flow analyses examine operating conditions at key intersections during peak travel periods.

Figure 4 shows the Existing AM and PM peak hour traffic volumes for the key intersections located in the downtown core area and adjacent to the downtown core (traffic counts collected in March 2017 are included in the Technical Appendix for reference). Consistent with City policy, levels of service were calculated for the study-area intersections using the operations methodology contained in the Highway Capacity Manual (HCM).[1] Existing levels of service are shown in Table 2.

[1] Highway Capacity Manual, Transportation Research Board, 2010.



LEGEND

X - Average Daily Traffic Volume

N
NOT TO SCALE

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EXISTING AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 3

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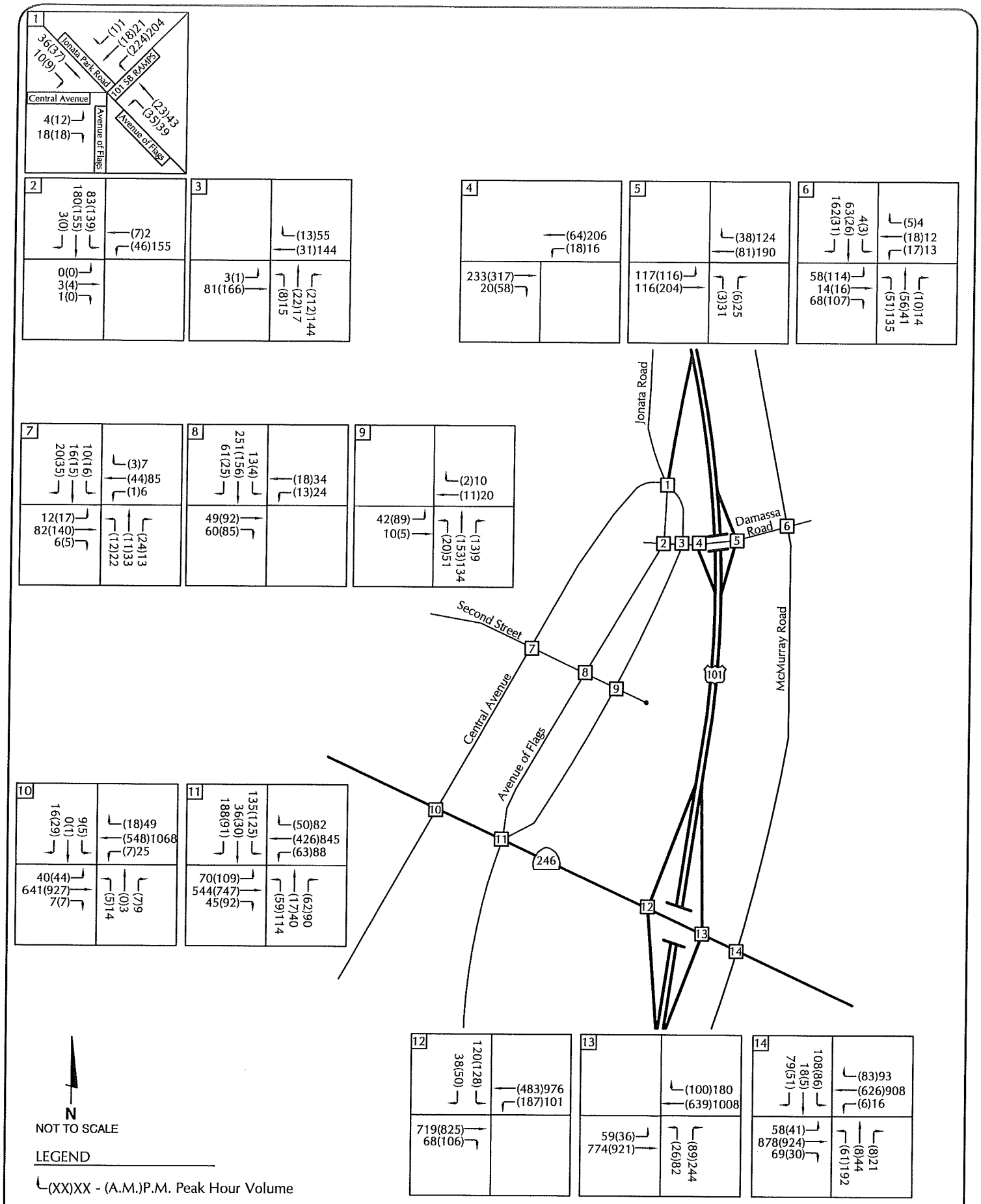

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EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 4

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Table 2
Levels of Service – Existing Conditions

Intersection		Control	Delay / LOS (a)	
			AM Peak Hour	PM Peak Hour
#1	US 101 SB/Jonata/AOF	Stop Sign	8.6 Sec./LOS A	8.5 Sec./LOS A
#2	Damassa/Southbound AOF	Stop Sign	13.8 Sec./LOS B	14.3 Sec./LOS B
#3	Damassa/Northbound AOF	Stop Sign	12.4 Sec./LOS B	11.2 Sec./LOS B
#4	Damassa/US 101 SB	Yield	1.9 Sec./LOS A	0.7 Sec./LOS A
#5	Damassa/US 101 NB	Stop Sign	3.9 Sec./LOS A	7.5 Sec./LOS A
#6	Damassa/McMurray	Stop Sign	8.8 Sec./LOS A	9.2 Sec./LOS A
#7	Second/Central	Stop Sign	8.0 Sec./LOS A	7.9 Sec./LOS A
#8	Second/Southbound AOF	Stop Sign	11.2 Sec./LOS B	12.2 Sec./LOS B
#9	Second/Northbound AOF	Stop Sign	10.9 Sec./LOS B	10.7 Sec./LOS B
#10	SR 246/Central	Stop Sign	10.2 Sec./LOS B	11.9 Sec./LOS B
#11	SR 246/AOF	Signal	27.4 Sec./LOS C	30.2 Sec./LOS C
#12	SR 246/US 101 SB	Signal	20.3 Sec./LOS C	15.7 Sec./LOS B
#13	SR 246/US 101 NB	Signal	14.8 Sec./LOS B	18.8 Sec./LOS B
#14	SR 246/McMurray	Signal	28.5 Sec./LOS C	33.4 Sec./LOS C

Avenue of Flags - Downtown Core Intersection.

(a) LOS for Stop Sign and Yield intersections based on average delay per vehicle in seconds for Stop and Yield movements. LOS for signalized intersections based on average delay per vehicle in seconds for all vehicles using the intersection.

As shown in Table 2, the key intersections that serve the Specific Plan currently operate at LOS C or better during the AM and PM peak hour periods, which meets the City's LOS C standard. As highlighted, the Stop Sign intersections within the Avenue of Flags downtown core area currently operate at LOS A and LOS B, indicating low delays and good service levels.

SPECIFIC PLAN ANALYSIS

Traffic Diversions

The circulation goal of the Specific Plan is to create a downtown village along Avenue of Flags that facilitates multiple modes of circulation, including vehicles, transit riders, pedestrians and bicyclists. In order to provide a more welcoming and effective pedestrian environment, the Specific Plan proposes enhancement and/or introduction of sidewalks, promenades, plazas, outdoor dining areas, and street trees (where none currently exist) throughout the Specific Plan area. Traffic-calming and safety measures along the Avenue of Flags roadways will be implemented to accommodate local traffic, deliveries, pedestrians, and bicyclists - including slowing traffic exiting US 101 to a speed appropriate for a downtown district.

Phase 1 of the Specific Plan includes the street network changes to Avenue of Flags, including traffic calming & safety measures (i.e. reduce speed limit; install four-way stops including signage and pavement markings, painted crosswalks, sidewalks, and parking improvements). The new street design standards will provide one travel lane in each direction with angled parking in different locations along Avenue of Flags. Four-Way Stop Sign controls are planned along Avenue of Flags at Damassa Road, Second Street, and First Street. These street modifications will result in slower speeds within the downtown core and cause some diversion of existing traffic that travels on Avenue of Flags in the downtown core.

Potential diversions were analyzed based on the existing and future traffic speeds along Avenue of Flags as well as the existing traffic patterns in the Avenue of Flags core area. Radar speeds survey were taken along Avenue of Flags (speed data included in the Technical Appendix). The average speed of traffic exiting southbound US 101 and entering Avenue of Flags between the off-ramp and Damassa Road is 33 MPH; and traffic speeds average 30 MPH between Damassa Road and SR 246. For northbound Avenue of Flags, the average speed of traffic was measured at 33 MPH between Second Street and Damassa Road. The Specific Plan modifications (Stop Signs, angled parking, and pedestrian improvements) will reduce speeds to 25 MPH.

The Existing AM and PM peak hour traffic patterns were reviewed to determine the potential traffic diversion caused by the proposed modifications. The diversions analysis focuses on the PM peak hour for two reasons, 1) traffic during the AM peak hour is lower than the PM peak hour, and 2) land uses within the Avenue of Flags core area are mostly commercial and do not open until mid-morning after the 7-9 AM peak commuter period. Thus, friction caused by parking maneuvers and pedestrian activity along Avenue of Flags will be nominal during the AM commute period and mostly happen during the noon to 6 PM period when commercial activity occurs.

Traffic entering Avenue of Flags from southbound US 101 will be affected by the slower speeds and traffic calming measures. About 225 vehicles exit southbound US 101 at the Jonata Road exit. 90% of that traffic proceed southbound on Avenue of Flags (the remaining 10% turn onto Jonata Road or Central Avenue). Of the 90% on Avenue of Flags, about 10% is destined for the businesses located between the off-ramp and Damassa Road, 30% turn left onto Damassa Road to travel to the land uses along McMurray Road east of US 101, and the remaining traffic proceeds south on Avenue of Flags. About 5% of the southbound Avenue of Flags traffic is destined for the businesses located between Damassa Road and Second Street. The remaining traffic turns right onto Second street or proceeds southbound along Avenue of Flags to businesses between Second Street and SR 246; or proceeds to SR 246 and turns right onto SR 246 or proceeds straight across SR 246 to the Avenue of Flags area south of SR 246. The analysis determined that about 20% of traffic entering Avenue of Flags from southbound US 101 will divert to other routes because of the slower speeds and traffic calming measures planned for Avenue of Flags. 5% of the diverted traffic is expected to use Central Avenue and 15% of the diverted traffic is expected to stay on southbound US 101 and exit at SR 246 and then travel westbound SR 246 to their destinations.

There is a second component of southbound Avenue of Flags traffic diversion that will occur. The existing traffic pattern shows that a significant amount of traffic generated by the land uses along McMurray Road use the US 101 overcrossing at Damassa Road to travel westbound to Avenue of Flags and then travel southbound on Avenue of Flags to reach destinations in the western portion of Buellton (or beyond). About 20% of that traffic will divert to southbound McMurray Road and then turn right onto westbound SR 246 to reach their destinations.

For northbound Avenue of Flags, there will be some diversion of the existing traffic that travels through Avenue of Flags from the western portions of Buellton to reach destinations along McMurray Road. About 10% of the traffic that travels northbound Avenue of Flags and then turn rights onto Damassa Road to reach destinations along McMurray Road is expected to divert to eastbound SR 246 and then turn left onto McMurray Road to reach their destinations.

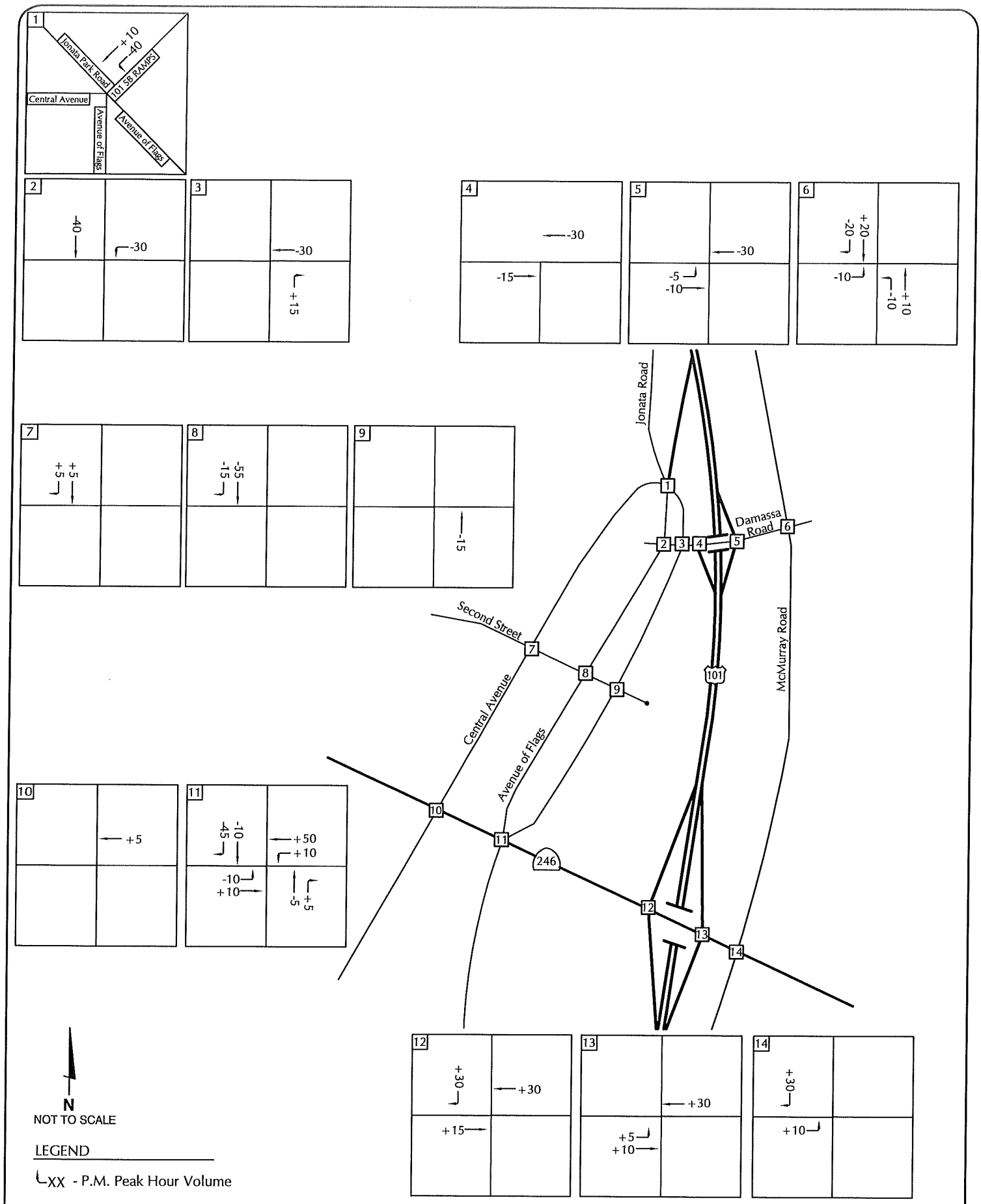
Figure 5 shows the anticipated traffic diversions that will result from the traffic calming & safety measures. Figure 6 illustrates the "Existing Conditions + Traffic Diversions" volumes. Levels of service were calculated for the key intersections to determine the effects of the traffic calming & safety measures. Table 3 compares the level of service forecasts for Existing Conditions and Existing Conditions + Traffic Diversions.

Table 3
Levels of Service – Existing Conditions + Traffic Diversion

Intersection		Control	P.M. Peak Delay / LOS (a)	
			Existing	Existing + Diversion
#1	US 101 SB/Jonata/AOF	Stop Sign	8.5 Sec./LOS A	8.2 Sec./LOS A
#2	Damassa/Southbound AOF	Stop Sign	14.3 Sec./LOS B	8.3 Sec./LOS A
#3	Damassa/Northbound AOF	Stop Sign	11.2 Sec./LOS B	8.2 Sec./LOS A
#4	Damassa/US 101 SB	Yield	0.7 Sec./LOS A	0.7 Sec./LOS A
#5	Damassa/US 101 NB	Stop Sign	7.5 Sec./LOS A	7.4 Sec./LOS A
#6	Damassa/McMurray	Stop Sign	9.2 Sec./LOS A	9.1 Sec./LOS A
#7	Second/Central	Stop Sign	7.9 Sec./LOS A	7.8 Sec./LOS A
#8	Second/Southbound AOF	Stop Sign	12.2 Sec./LOS B	8.8 Sec./LOS A
#9	Second/Northbound AOF	Stop Sign	10.7 Sec./LOS B	8.2 Sec./LOS A
#10	SR 246/Central	Stop Sign	11.9 Sec./LOS B	11.8 Sec./LOS B
#11	SR 246/AOF	Signal	30.2 Sec./LOS C	30.8 Sec./LOS C
#12	SR 246/US 101 SB	Signal	15.7 Sec./LOS B	15.9 Sec./LOS B
#13	SR 246/US 101 NB	Signal	18.8 Sec./LOS B	18.8 Sec./LOS B
#14	SR 246/McMurray	Signal	33.4 Sec./LOS C	34.6 Sec./LOS C

Avenue of Flags - Downtown Core Intersection.

(a) LOS for Stop Sign and Yield intersections based on average delay per vehicle in seconds for Stop and Yield movements. LOS for signalized intersections based on average delay per vehicle in seconds for all vehicles using the intersection.



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TRAFFIC DIVERSIONS - PM PEAK HOUR

FIGURE 5

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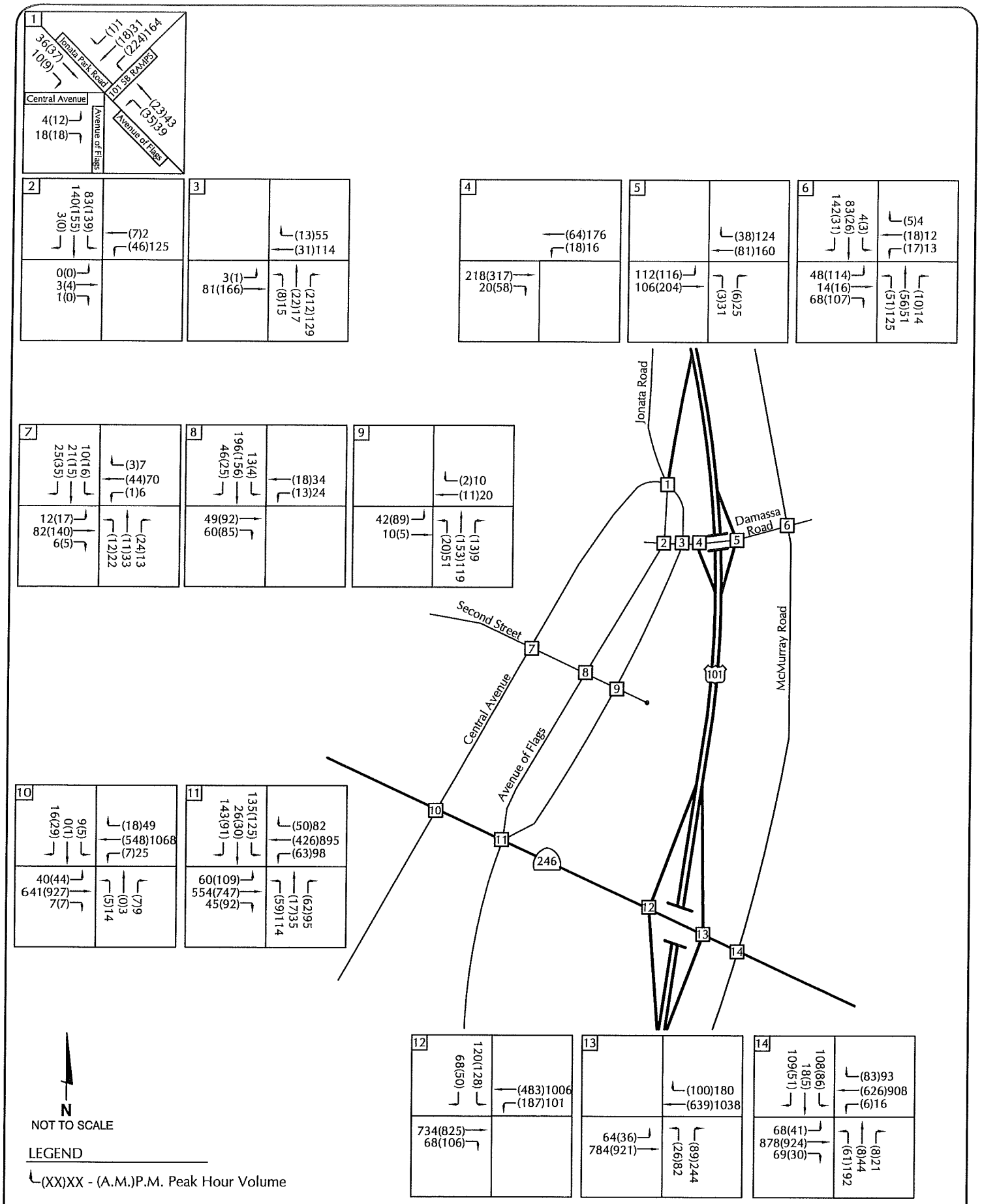

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EXISTING + DIVERSIONS TRAFFIC VOLUMES

FIGURE 6

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As shown in Table 3, the key intersections that serve the Specific Plan are forecast to operate at LOS C or better, which meets the City's LOS C standard. Thus, the proposed street network modifications would not trigger significant impacts. Closer review of the level of forecasts show that the intersections within the Avenue of Flags core area are forecast to operate at LOS A, except for the LOS C forecast for the SR 246/Avenue of Flags intersection.

Near-Term Conditions

"Near-Term" traffic conditions were forecast assuming the additional traffic that will be generated by approved and pending projects. The Near-Term traffic volumes were forecast using a list of approved and pending projects provided by City staff (a copy of the approved and pending project list is included in the Technical Appendix for reference). Trip generation estimates were calculated for the approved and pending projects using trip generation rates outlined in the Institute of Transportation Engineers (ITE) Trip Generation manual.[2] A worksheet showing the trip generation calculations is included in the Technical Appendix for reference. Traffic generated by the approved and pending projects was then assigned to the study-area street network. The trip assignments for the approved and pending projects account for the traffic calming & safety measures planned in the Avenue of Flags core area (i.e. some of the future traffic will use route diversions). Figure 7 illustrates the Near-Term traffic forecasts (including the traffic diversions).

Near-Term levels of service for the key intersections are listed in Table 4. It is noted that the levels of service for the existing 1-way and 2-way Stop sign-controlled intersections along Avenue of Flags assume the Specific Plan improvements, which include removing turn lanes and controlling the intersections with all-way Stop signs. Additionally, the Near-Term levels of service for the SR 246/McMurray Road intersection assume the near-term improvements programmed for the intersection, which include widening McMurray Road and implementing left-turn phasing on the northbound and southbound approaches (which are currently split phased).

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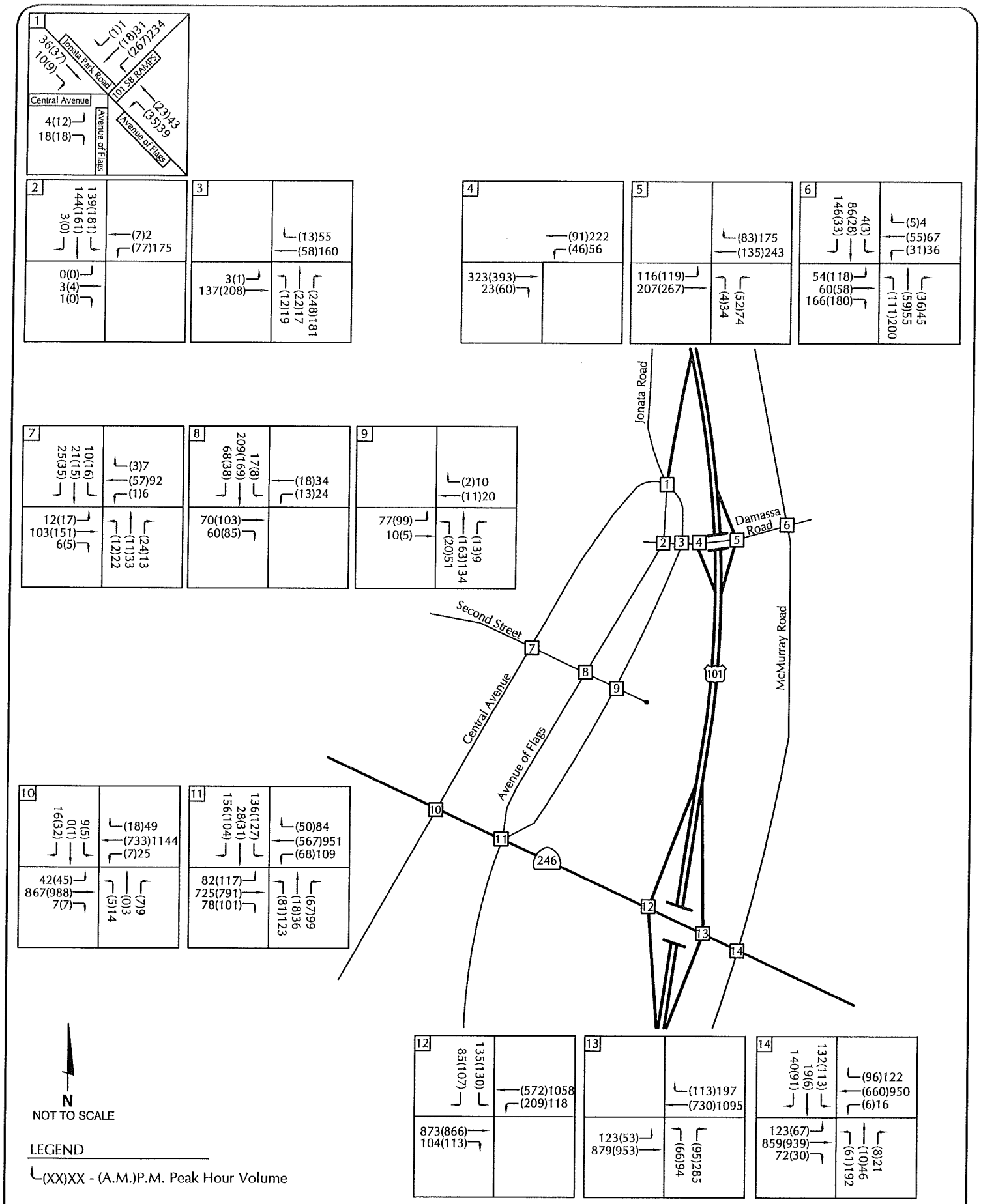
[2] Trip Generation, Institute of Transportation Engineers, 9th Edition, 2012.



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NEAR-TERM PEAK HOUR TRAFFIC VOLUMES

FIGURE 7

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Table 4
Levels of Service – Near-Term Conditions

Intersection		Control	Delay / LOS (a)	
			AM Peak Hour	PM Peak Hour
#1	US 101 SB/Jonata/AOF	Stop Sign	9.1 Sec./LOS A	8.8 Sec./LOS A
#2	Damassa/Southbound AOF	Stop Sign	10.3 Sec./LOS B	10.1 Sec./LOS B
#3	Damassa/Northbound AOF	Stop Sign	9.4 Sec./LOS A	9.2 Sec./LOS A
#4	Damassa/US 101 SB	Yield	3.1 Sec./LOS A	2.1 Sec./LOS A
#5	Damassa/US 101 NB	Stop Sign	5.6 Sec./LOS A	6.5 Sec./LOS A
#6	Damassa/McMurray	Stop Sign	11.1 Sec./LOS B	12.9 Sec./LOS B
#7	Second/Central	Stop Sign	8.1 Sec./LOS A	8.0 Sec./LOS A
#8	Second/Southbound AOF	Stop Sign	8.8 Sec./LOS A	9.3 Sec./LOS A
#9	Second/Northbound AOF	Stop Sign	8.5 Sec./LOS A	8.5 Sec./LOS A
#10	SR 246/Central	Stop Sign	10.7 Sec./LOS B	13.3 Sec./LOS B
#11	SR 246/AOF	Signal	27.9 Sec./LOS C	33.3 Sec./LOS C
#12	SR 246/US 101 SB	Signal	21.3 Sec./LOS C	16.5 Sec./LOS B
#13	SR 246/US 101 NB	Signal	8.6 Sec./LOS A	18.0 Sec./LOS C
#14	SR 246/McMurray(b)	Signal	29.4 Sec./LOS C	40.3 Sec./LOS D

Avenue of Flags - Downtown Core Intersection.

(a) LOS for Stop Sign and Yield intersections based on average delay per vehicle in seconds for Stop and Yield movements. LOS for signalized intersections based on average delay per vehicle in seconds for all vehicles using the intersection.

(b) LOS assumes near-term improvement planned for the intersection.

As shown in Table 4, the Stop-Sign controlled intersections along Avenue of Flags within the Specific Plan area are forecast to operate at LOS A-B during the AM and PM peak hour periods. The signalized intersection at SR 246/Avenue of Flags is forecast at LOS C, which meets the City's LOS C standard.

Most of the other intersections that are outside of the Specific Plan area are forecast to operate at LOS C or better and meet the City's LOS C standard. The SR 246/McMurray Road intersection is forecast to operate at LOS D during the PM peak commuter period assuming the additional traffic that will be generated by approved and pending projects. As noted, the LOS D forecast assumes the near-term improvements programmed for the intersection (widen McMurray Road and implement left-turn phasing on the northbound and southbound approaches). The LOS D forecast is consistent with other cumulative traffic forecasts for the intersection. As set forth in the City's General Plan, the long-term programmatic improvements to the intersection (lane additions) would return operations to acceptable levels of service.

Near-Term + Specific Plan (5-Year Development Plan)

Near-Term + Specific Plan traffic conditions were forecast assuming the anticipated development within the Specific Plan for the first 5-year period. City staff estimates that 25,000 SF of commercial uses and 54 dwelling units will be developed within the Specific Plan area during the 5-year period. Table 5 shows the trip generation estimates for the 5-year developments.

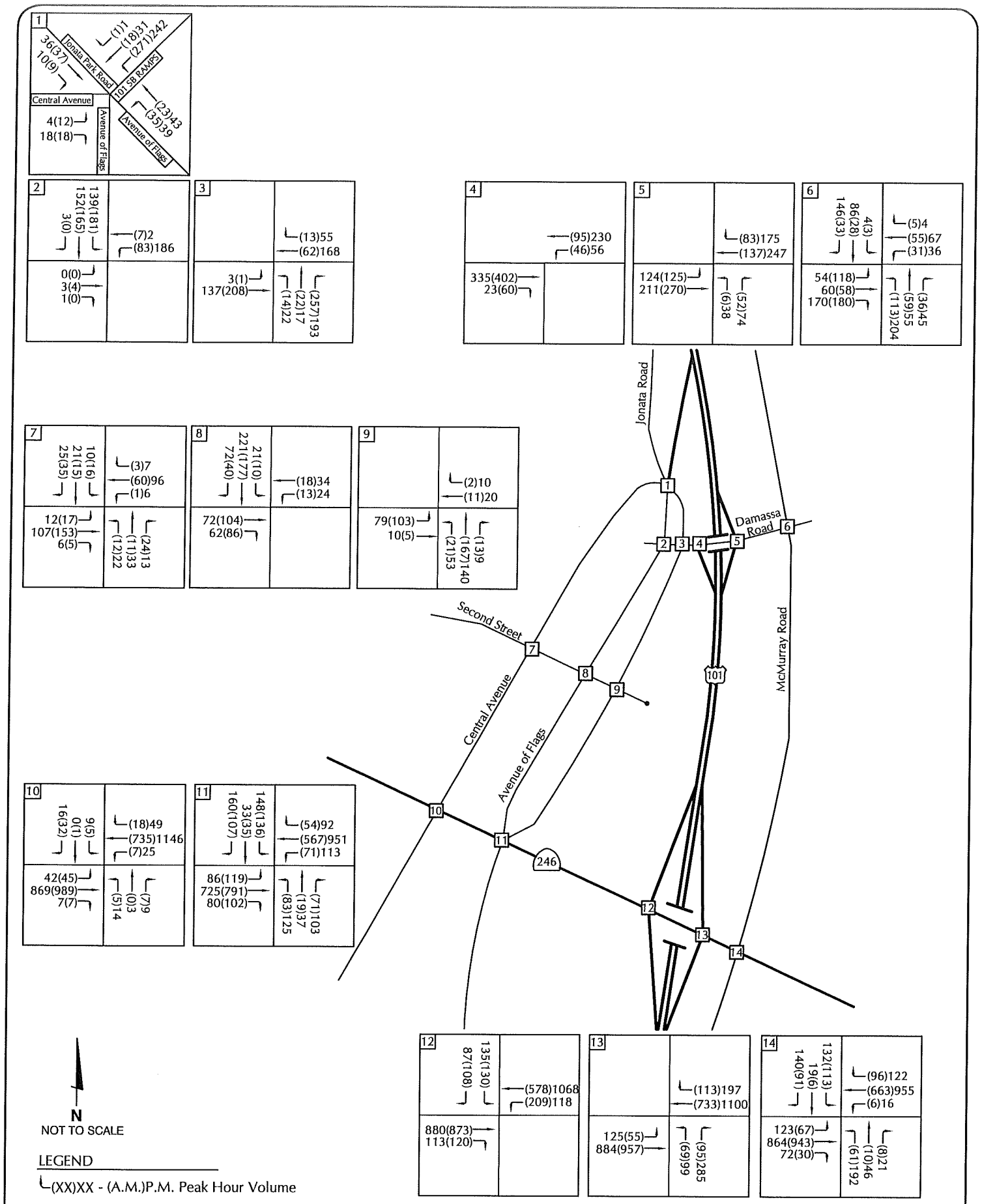
Table 5
Specific Plan – 5-Year Trip Generation

Land Use	Size	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Commercial	25 KSF	44.32	1,108	1.33	33	2.71	68
Residential	54 DU	6.65	359	0.51	28	0.62	33
Totals:			**1,467**		**61**		**101**

Note: Trip generation based on ITE rates.

As shown in Table 5, the Specific Plan developments envisioned for the 5-year period would generate 1,467 daily trips, with 61 trips occurring during the A.M. peak hour and 101 trips occurring during the P.M. peak hour. Traffic generated by the developments envisioned for the 5-year period was assigned to the study-area street network to assess traffic operations for the Near-Term + Specific Plan scenario. Figure 8 illustrates the traffic forecast for the Near-Term + Specific Plan (5-Year) scenario.

Levels of service for the Near-Term + Specific Plan (5-Year) scenario are listed in Table 6. The levels of service for the SR 246/McMurray Road intersection assume the near-term improvements programmed for the intersection (widen McMurray Road and implement left-turn phasing on the northbound and southbound approaches).



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NEAR-TERM + 5-YEAR PEAK HOUR TRAFFIC VOLUMES

FIGURE 8

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Table 6
Levels of Service – Near-Term + Specific Plan (5-Year)

Intersection		Control	Delay / LOS (a)	
			AM Peak Hour	PM Peak Hour
#1	US 101 SB/Jonata/AOF	Stop Sign	9.1 Sec./LOS A	8.9 Sec./LOS A
#2	Damassa/Southbound AOF	Stop Sign	10.4 Sec./LOS B	10.3 Sec./LOS B
#3	Damassa/Northbound AOF	Stop Sign	9.5 Sec./LOS A	9.4 Sec./LOS A
#4	Damassa/US 101 SB	Yield	3.1 Sec./LOS A	2.0 Sec./LOS A
#5	Damassa/US 101 NB	Stop Sign	5.8 Sec./LOS A	9.5 Sec./LOS A
#6	Damassa/McMurray	Stop Sign	11.1 Sec./LOS B	13.1 Sec./LOS B
#7	Second/Central	Stop Sign	8.1 Sec./LOS A	8.1 Sec./LOS A
#8	Second/Southbound AOF	Stop Sign	8.9 Sec./LOS A	9.6 Sec./LOS A
#9	Second/Northbound AOF	Stop Sign	8.6 Sec./LOS A	8.5 Sec./LOS A
#10	SR 246/Central	Stop Sign	10.6 Sec./LOS B	13.3 Sec./LOS B
#11	SR 246/AOF	Signal	29.6 Sec./LOS C	34.1 Sec./LOS C
#12	SR 246/US 101 SB	Signal	21.4 Sec./LOS B	16.6 Sec./LOS B
#13	SR 246/US 101 NB	Signal	8.6 Sec./LOS A	21.8 Sec./LOS C
#14	SR 246/McMurray(b)	Signal	25.2 Sec./LOS C	40.7 Sec./LOS D

Avenue of Flags - Downtown Core Intersection.
(a) LOS for Stop Sign and Yield intersections based on average delay per vehicle in seconds for Stop and Yield movements. LOS for signalized intersections based on average delay per vehicle in seconds for all vehicles using the intersection.
(b) LOS assumes near-term improvement planned for the intersection.

As shown in Table 6, the Stop-Sign controlled intersections along Avenue of Flags within the Specific Plan area are forecast to operate at LOS A-B during the AM and PM peak hour periods assuming the Near-Term + Specific Plan (5-Year) traffic volumes. The signalized intersection at SR 246/Avenue of Flags is forecast at LOS C during the AM and PM peak hours. Thus, operations at the intersections within the Specific Plan meet the City's LOS C standard.

Most of the intersections that are outside of the Specific Plan area are also forecast to operate at LOS C or better and meet the City's LOS C standard. The SR 246/McMurray Road intersection is forecast to operate at LOS D during the PM peak commuter period assuming the Near-Term + Specific Plan (5-Year) traffic volumes (LOS D also forecast for the Near-Term scenario without the additional traffic that would be generated by Specific Plan developments envisioned for the 5-year period). As noted, the LOS D forecast assumes the near-term improvements programmed for the intersection (widen McMurray Road and implement left-turn phasing on the northbound and southbound approaches).

Key Findings

The Existing Conditions + Traffic Diversions and Near-Term + Specific Plan analyses identified the following key findings:

1. The Phase 1 street network changes to Avenue of Flags (reduce speed limit; four-way Stop signs, pavement markings, painted crosswalks, sidewalks, and parking improvements) will result in traffic diversions. Central Avenue is anticipated to receive an additional ±150 vehicles per day, mostly during the noon to 6 PM period when pedestrian and parking activity occurs within the Avenue of Flags core area and causes traffic diversions. Traffic diversion will also occur on US 101 (±350 vehicles per day), McMurray Road between Damassa Road and SR 246 (±400 vehicles per day), and on SR 246 between McMurray Road and Avenue of Flags (±750 vehicles per day).

2. The proposed street network modifications would not trigger significant impacts. The Stop-sign controlled intersections within the Avenue of Flags core area are forecast to operate at LOS A under the Existing Conditions + Traffic Diversion scenario. The signalized SR 246/Avenue of Flags intersection is forecast to operate at LOS C.

3. The Near-Term + Specific Plan (5-Year) analyses found that the Stop-sign controlled intersections along Avenue of Flags within the Specific Plan are forecast to operate at LOS A-B during the AM and PM peak hour periods; and the signalized intersection at SR 246/Avenue of Flags is forecast at LOS C during the AM and PM peak hours. Thus, operations at the intersections within the Specific Plan meet the City's LOS C standard. The SR 246/McMurray Road intersection is forecast to operate at LOS D during the PM peak commuter period under the Near-Term and Near-Term + Specific Plan (5-Year) scenarios assuming the near-term improvements programmed for the intersection (widen McMurray Road and implement left-turn phasing on the northbound and southbound approaches).

Mitigation Measures

SR 246/McMurray Road. The LOS D forecast for this intersection under Near-Term and Near-Term + Specific Plan (5-Year) conditions is consistent with other cumulative traffic forecasts for the intersection. As set forth in the City's General Plan, the long-term programmatic improvements to the intersection (lane additions) would return operations to acceptable levels of service. Developments within the Specific Plan would be required to contribute to the City's traffic mitigation fee program to fund the long-term programmatic improvements.

GENERAL PLAN BUILDOUT ANAYSES

The Specific Plan includes street network changes that will alter traffic patterns assuming General Plan Buildout traffic conditions. In addition, the additional commercial and residential developments that would be possible under the Specific Plan will increase traffic volumes under General Plan Buildout conditions. The following analysis determines if implementation of the Specific Plan would generate additional traffic impacts that were not identified for the existing General Plan.

Traffic Forecasts

Figure 9 illustrated the General Plan Buildout traffic volumes, as derived from the circulation analyses prepared for the existing General Plan.[3] General Plan Buildout + Specific Plan traffic conditions were forecast assuming the additional developments that could occur under the Specific Plan. City staff estimates that an additional 163 dwelling units and 75,000 SF of commercial uses could be developed within the Specific Plan area (when compared to potential development under the existing General Plan zoning designations). Table 7 shows the trip generation estimates for additional developments that could occur under the Specific Plan.

Table 7
Specific Plan Trip Generation

Land Use	Size	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Commercial	74,792 SF	44.32	3,315	1.33	99	2.71	203
Residential	163 DU	6.65	1,084	0.51	83	0.62	101
Totals:			**4,399**		**182**		**304**

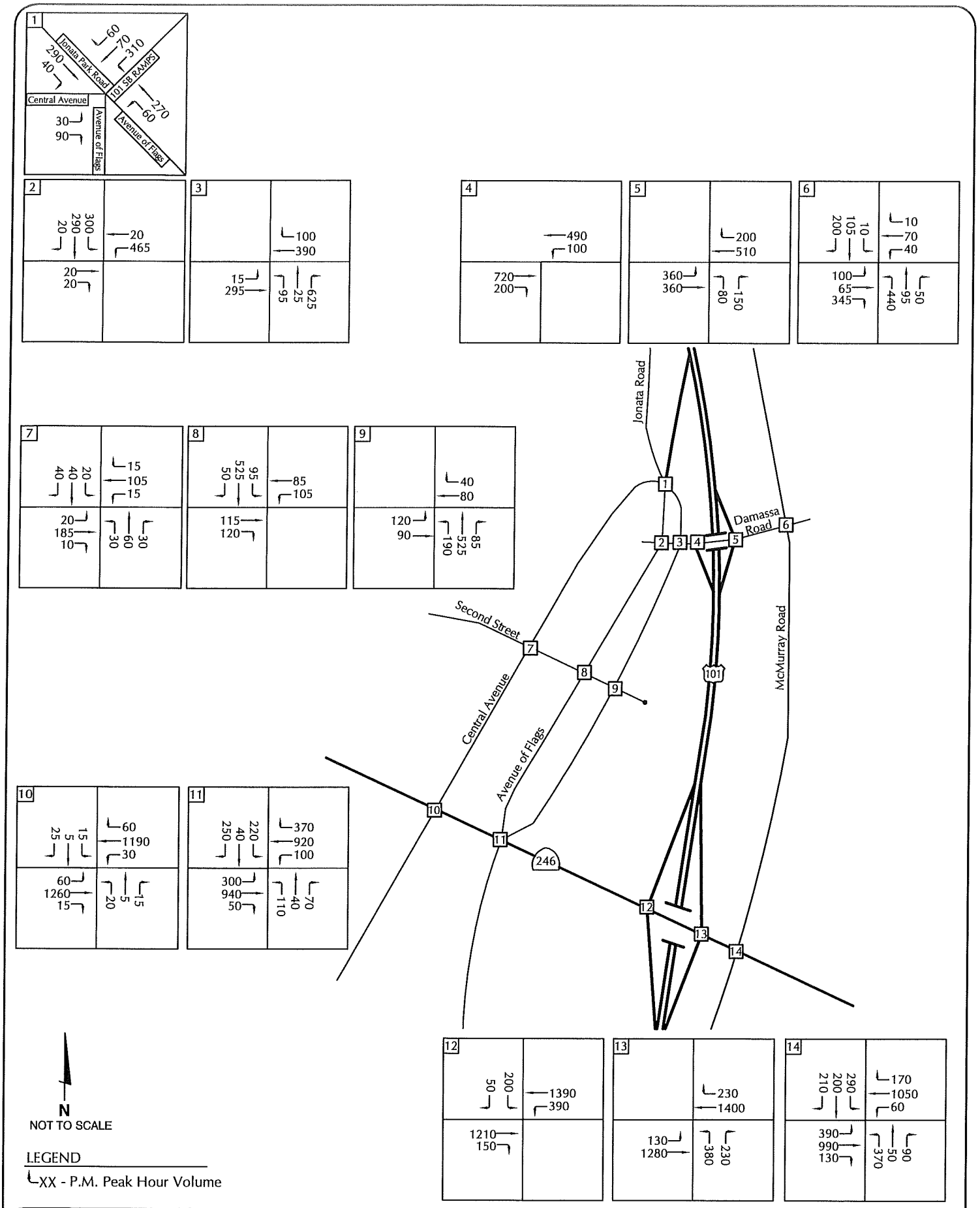
Note: Trip generation based on ITE rates.

As shown in Table 7, the additional development that could occur under the Specific Plan would generate 4,399 daily trips, with 182 trips occurring during the A.M. peak hour and 304 trips occurring during the P.M. peak hour. The additional traffic that would be generated by the Specific Plan developments was assigned to the study-area street network to assess potential traffic impacts. Figure 10 illustrates the traffic forecast for the General Plan Buildout + Specific Plan scenario.

Impact Analysis

Levels of service for the General Plan Buildout and General Plan Buildout + Specific Plan scenarios are listed in Table 8. It is noted that the General Plan Buildout levels of service for the intersections along Avenue of Flags in the core area assume the existing 1-way and 2-way Stop sign controls, while the General Plan Buildout + Specific Plan scenario assumes the Specific Plan improvements (reduce speed limit; four-way Stop signs, pavement markings, painted crosswalks, sidewalks, and parking improvements). Further, both the General Plan Buildout and General Plan Buildout + Specific Plan levels of service for SR 246/McMurray Road assume the near-term improvements programmed for the intersection (widen McMurray Road and implement left-turn phasing on the northbound and southbound approaches).

[3] Traffic Analysis for the Buellton General Plan Update, Associated Transportation Engineers, 2004.

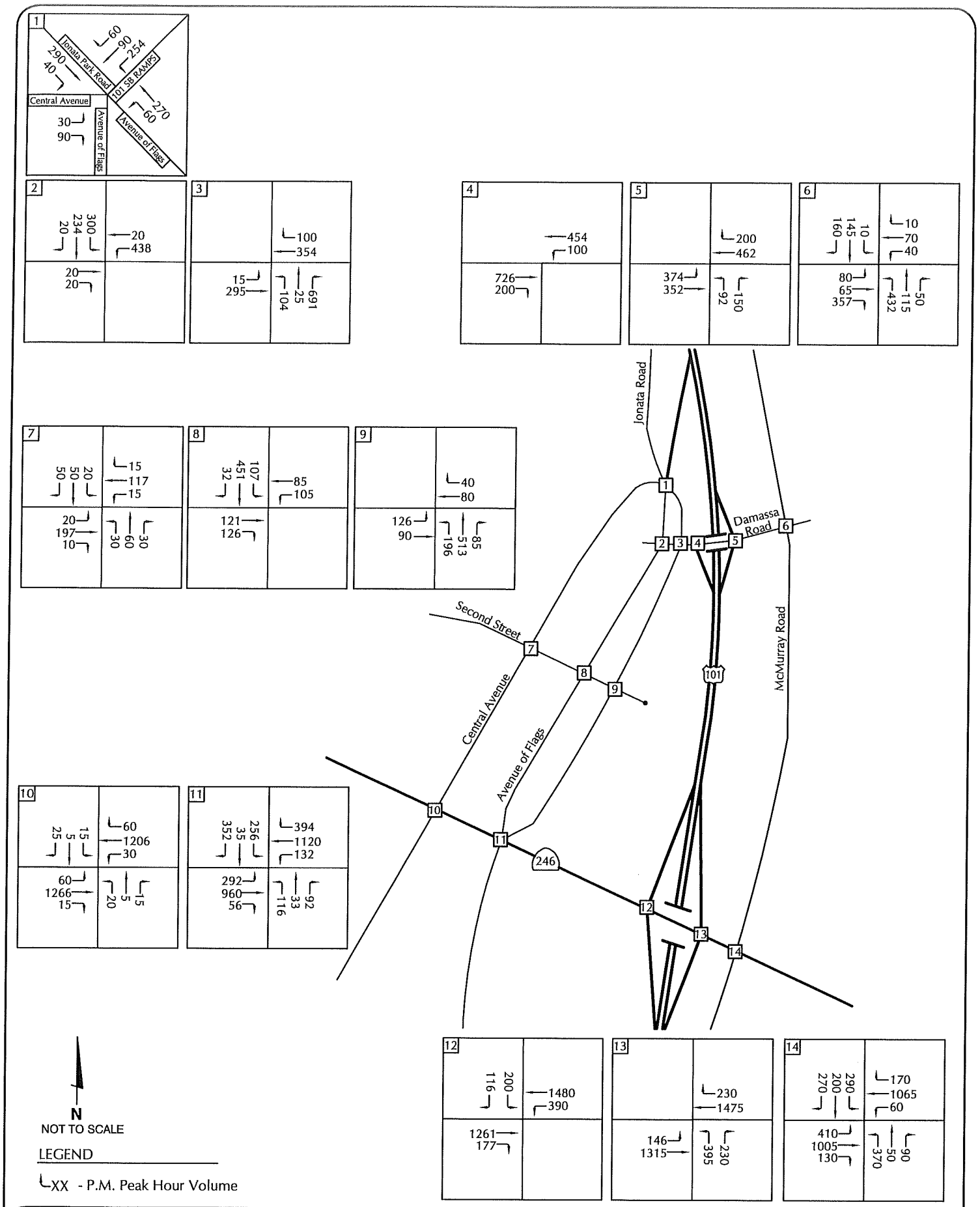


ASSOCIATED TRANSPORTATION ENGINEERS

FIGURE 9

EXISTING GENERAL PLAN BUILDOOUT TRAFFIC VOLUMES

EKM - ATE#17026



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING GENERAL PLAN BUILDOUT + SPECIFIC PLAN TRAFFIC VOLUMES

FIGURE 10

EKM - ATE#17026

Table 8
Levels of Service – General Plan Buildout

Intersection		Control	PM Peak Hour Delay / LOS (a)	
			Existing GP Buildout	GP Buildout + Specific Plan
#1	US 101 SB/Jonata/AOF	Stop Sign	19.7 Sec./LOS C	17.4 Sec./LOS C
#2	Damassa/Southbound AOF	Stop Sign	> 50.0 Sec./LOS F	27.9 Sec./LOS D
#3	Damassa/Northbound AOF	Stop Sign	> 50.0 Sec./LOS F	43.6 Sec./LOS E
#4	Damassa/US 101 SB	Yield	3.5 Sec./LOS A	3.5 Sec./LOS A
#5	Damassa/US 101 NB	Stop Sign	> 50.0 Sec./LOS F	> 50.0 Sec./LOS F
#6	Damassa/McMurray	Stop Sign	> 50.0 Sec./LOS F	49.2 Sec./LOS E
#7	Second/Central	Stop Sign	8.9 Sec./LOS A	9.2 Sec./LOS A
#8	Second/Southbound AOF	Stop Sign	> 50.0 Sec./LOS F	23.1 Sec./LOS C
#9	Second/Northbound AOF	Stop Sign	> 50.0 Sec./LOS F	42.4 Sec./LOS E
#10	SR 246/Central	Stop Sign	16.9 Sec./LOS C	17.0 Sec./LOS C
#11	SR 246/AOF	Signal	56.7 Sec./LOS E	78.8 Sec./LOS E
#12	SR 246/US 101 SB	Signal	24.3 Sec./LOS C	26.0 Sec./LOS C
#13	SR 246/US 101 NB	Signal	24.0 Sec./LOS C	24.9 Sec./LOS C
#14	SR 246/McMurray(b)	Signal	> 80.0 Sec./LOS F	> 80.0 Sec./LOS F

Avenue of Flags - Downtown Core Intersection.
(a) LOS for Stop Sign and Yield intersections based on average delay per vehicle in seconds for Stop and Yield movements. LOS for signalized intersections based on average delay per vehicle in seconds for all vehicles using the intersection.
(b) LOS assumes near-term improvement planned for the intersection.

Comparison of the General Plan Buildout and General Plan Buildout + Specific Plan levels of service listed in Table 8 show that the Specific Plan would not generate new impacts at the key intersections in the study area. In fact, delays and levels of service for some of the key intersections would be better assuming implementation of the Specific Plan. The key findings are outlined below.

Key Findings

General Plan Buildout – Specific Plan Intersections

The US 101 SB Off-Ramp/Jonata Park Road/Avenue of Flags intersection is forecast at LOS C assuming the existing lane geometry and traffic controls (Stop signs). This finding is consistent with the traffic analysis prepared for the existing General Plan.

The other Stop-sign controlled intersections along Avenue of Flags are forecast to operate at LOS F during the PM peak hour period assuming the existing traffic lanes and controls (1-way and 2-way Stop signs). These intersections were not included in the circulation analyses prepared for the General Plan. The poor levels of service are due to the delays incurred by vehicles on the side street trying to cross the free flow traffic streams traveling along Avenue of Flags.

The SR 246/Avenue of Flags intersection is forecast at LOS E. The circulation analyses prepared for the existing General Plan forecast LOS D for the intersection. The intersection has been modified since the time that the General Plan was update. The northbound approach previously contained 2 through lanes but has since been modified to contain 1 through lane.

General Plan Buildout – Other Intersections

The US 101 NB/Damassa Road intersection is forecast at LOS F under the General Plan Buildout scenario. This finding is consistent with the traffic analysis prepared for the General Plan. As outlined in the traffic analysis prepared for the General Plan, the 2-lane Damassa Road overcrossing structure will not accommodate the General Plan Buildout traffic volumes.

The Damassa Road/McMurray Road intersection is forecast at LOS F under the General Plan Buildout scenario assuming the existing all-way Stop-sign control. This intersection was not included in the circulation analyses prepared for the General Plan.

The SR 246/McMurray Road intersection is forecast at LOS F under the General Plan Buildout scenario. This finding is consistent with the traffic analysis prepared for the adopted General Plan.

General Plan Buildout + Specific Plan – Specific Plan Intersections

The US 101 SB Off-Ramp/Jonata Park Road/Avenue of Flags intersection is forecast at LOS C assuming the existing lane geometry and traffic controls (same LOS as forecast for the General Plan Buildout scenario).

The other Stop-sign controlled intersections along Avenue of Flags are forecast to operate at LOS C-E during the PM peak hour period assuming the Specific Plan improvements (better than the LOS F forecasts for General Plan Buildout conditions because the all-way Stop intersections would provide vehicles on the side street the ability to cross the traffic streams traveling along Avenue of Flags that would be controlled by new Stop signs). The LOS C-E forecasts indicate that some queuing and congestion would occur during peak periods. Queuing and congestion would occur during portions of the afternoon hours (Noon to 6 PM) when business activity peaks along the corridor – resulting in higher traffic volumes combined with friction caused by parking maneuvers and pedestrian/bike activity along the corridor. Operations would be better during the evening and morning hours when traffic volumes and pedestrian/bike activity would be lower.

The SR 246/Avenue of Flags intersection is forecast at LOS E (same LOS as forecast for the General Plan Buildout scenario).

General Plan Buildout – Other Intersections

The US 101 NB/Damassa Road intersection is forecast at LOS F assuming General Plan Buildout + Specific Plan traffic (same LOS as the General Plan Buildout scenario).

The Damassa Road/McMurray Road intersection is forecast at LOS F under the General Plan Buildout + Specific Plan conditions assuming the existing all-way Stop-sign controls (same LOS as General Plan Buildout scenario).

The SR 246/McMurray Road intersection is forecast at LOS F under the General Plan Buildout + Specific Plan conditions (same LOS as General Plan Buildout scenario).

Mitigation Measures

As noted, the Specific Plan would not generate new impacts at the key intersections in the study area. In fact, delays and levels of service for some of the key intersections would be better assuming implementation of the Specific Plan. The following mitigation measures are recommended for the General Plan Buildout scenarios.

Specific Plan Intersections

Downtown Core. The Stop-sign controlled intersections along Avenue of Flags (Damassa/Southbound AOF, Damassa/Northbound AOF, Second/Southbound AOF, Second/Northbound AOF) are forecast to operate at LOS F under General Plan Buildout conditions and LOS C-E under General Plan Buildout + Specific Plan conditions. Installing traffic signals at the Avenue of Flags intersections (Damassa/Southbound AOF, Damassa/Northbound AOF, Second/Southbound AOF, Second/Northbound AOF) would provide LOS B-C operations (both scenarios).

It is recognized that the LOS C-E forecasts for the General Plan Buildout + Specific Plan scenario may be acceptable since Stop-sign controlled intersections within the core area may be desirable in order to meet the Specific Plan goals (i.e. transformation of the Avenue of Flags corridor from an aging automobile-oriented thorough-fare to a vibrant, pedestrian friendly "main street" with a welcoming village atmosphere). As noted, queuing and congestion is expected if the intersections are controlled by all-way Stop signs. Queuing and congestion would occur during portions of the afternoon hours (Noon to 6 PM) when business activity peaks along the corridor – resulting in higher traffic volumes combined with friction caused by parking maneuvers and pedestrian/bike activity. Operations would be better (LOS C or better) during the evening and morning hours when traffic volumes and pedestrian/bike activity would be lower.

SR 246/Avenue of Flags. This intersection is forecast at LOS E under General Plan Buildout and General Plan Buildout + Specific Plan conditions. The high volume of SR 246 westbound right turns show the need for a separate right-turn lane. Widening the westbound approach and installing the westbound right-turn lane with a green arrow overlap with the southbound left turns would return operations to LOS D for both scenarios (same LOS as adopted in the existing General Plan).

Other Intersections

US 101 NB/Damassa Road. This intersection is forecast at LOS F under General Plan Buildout and General Plan Buildout + Specific Plan conditions. Consistent with circulation analyses prepared for the adopted General Plan, the 2-lane Damassa Road overcrossing structure will require widening to provide additional lanes.

Damassa Road/McMurray Road. This intersection is forecast at LOS F under General Plan Buildout and General Plan Buildout + Specific Plan conditions. Installing traffic signals would provide LOS C operations (both scenarios).

SR 246/McMurray Road. This intersection is forecast at LOS F under General Plan Buildout and General Plan Buildout + Specific Plan conditions. Consistent with circulation analyses prepared for the adopted General Plan, additional lanes will be required and the SR 246 eastbound and westbound approaches in order to achieve acceptable operations.

• • •

STUDY PARTICIPANTS AND REFERENCES

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Erica Monson, Transportation Planner

Persons Contacted

Andrea Olson Keefer, City of Buellton
Irma Tucker, City of Buellton
Rose Hess, City of Buellton

References

City of Buellton General Plan, City of Buellton, December 2008.

Highway Capacity Manual, Transportation Research Board, 2010.

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TECHNICAL APPENDIX

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TRAFFIC COUNT DATA

TRAFFIC SPEED SURVEYS

PROJECT TRIP GENERATION CALCULATIONS

CUMULATIVE PROJECT LIST

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

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Reference 2	Damassa/Southbound AOF
Reference 3	Damassa/Northbound AOF
Reference 4	Damassa/US 101 SB
Reference 5	Damassa/US 101 NB
Reference 6	Damassa/McMurray
Reference 7	Second/Central
Reference 8	Second/Southbound AOF
Reference 9	Second/Northbound AOF
Reference 10	SR 246/Central
Reference 11	SR 246/AOF
Reference 12	SR 246/US 101 SB
Reference 13	SR 246/US 101 NB
Reference 14	SR 246/McMurray

TRAFFIC COUNT DATA

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Ave Of Flags and SR 246 , Buellton

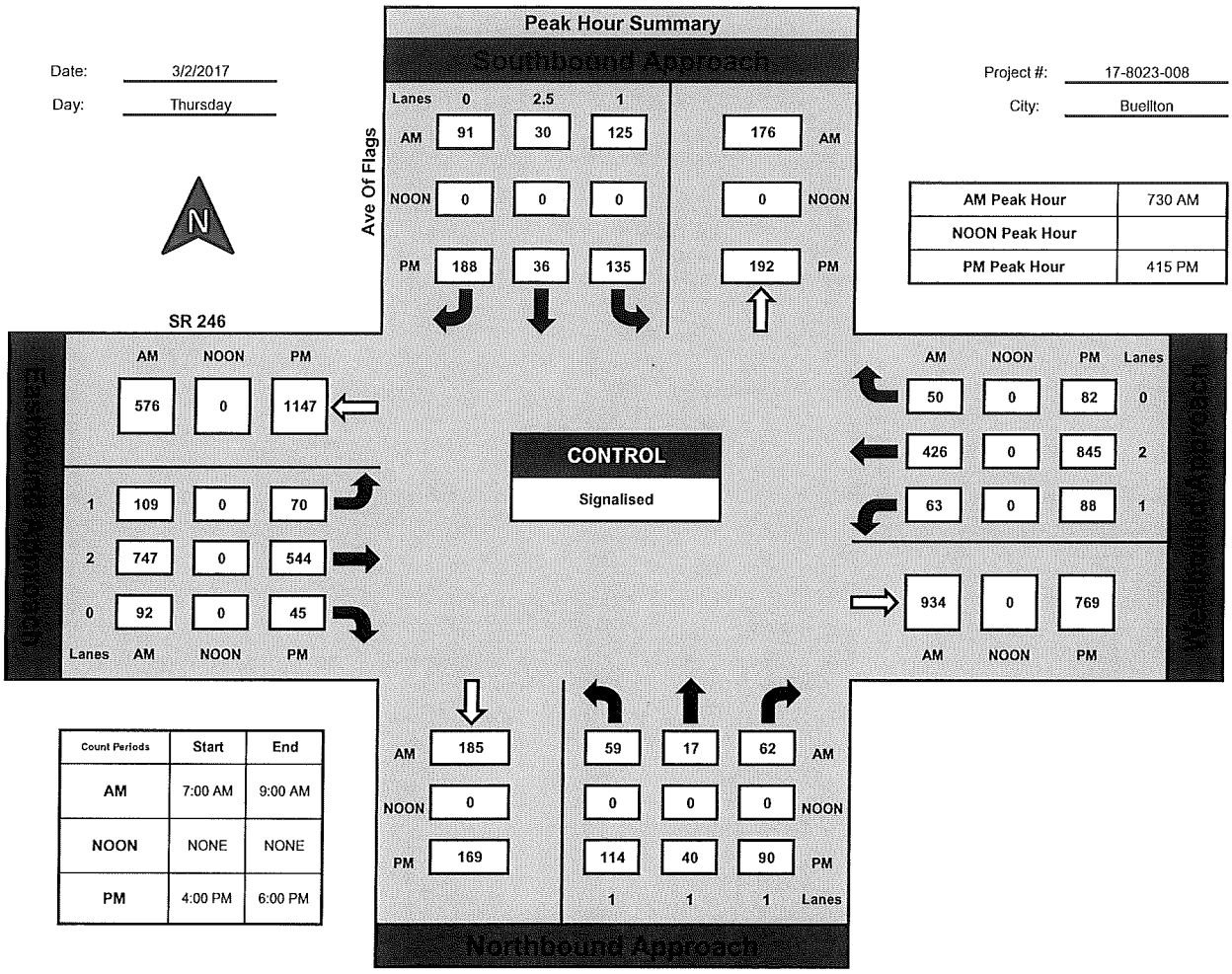
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-008

City: Buellton

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM



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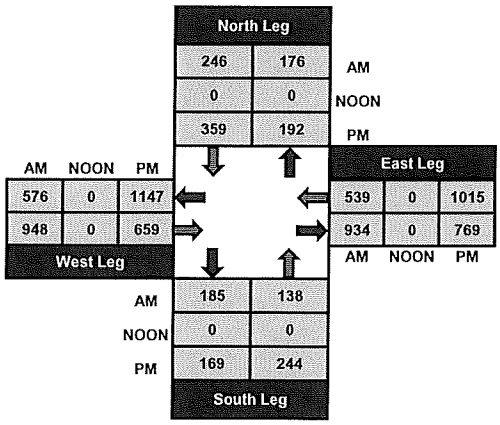
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



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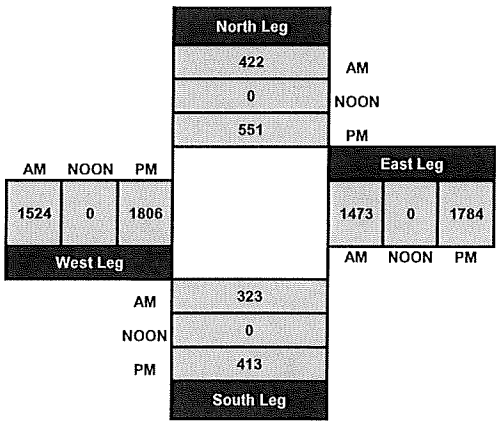


ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Central Ave and SR 246 , Buellton

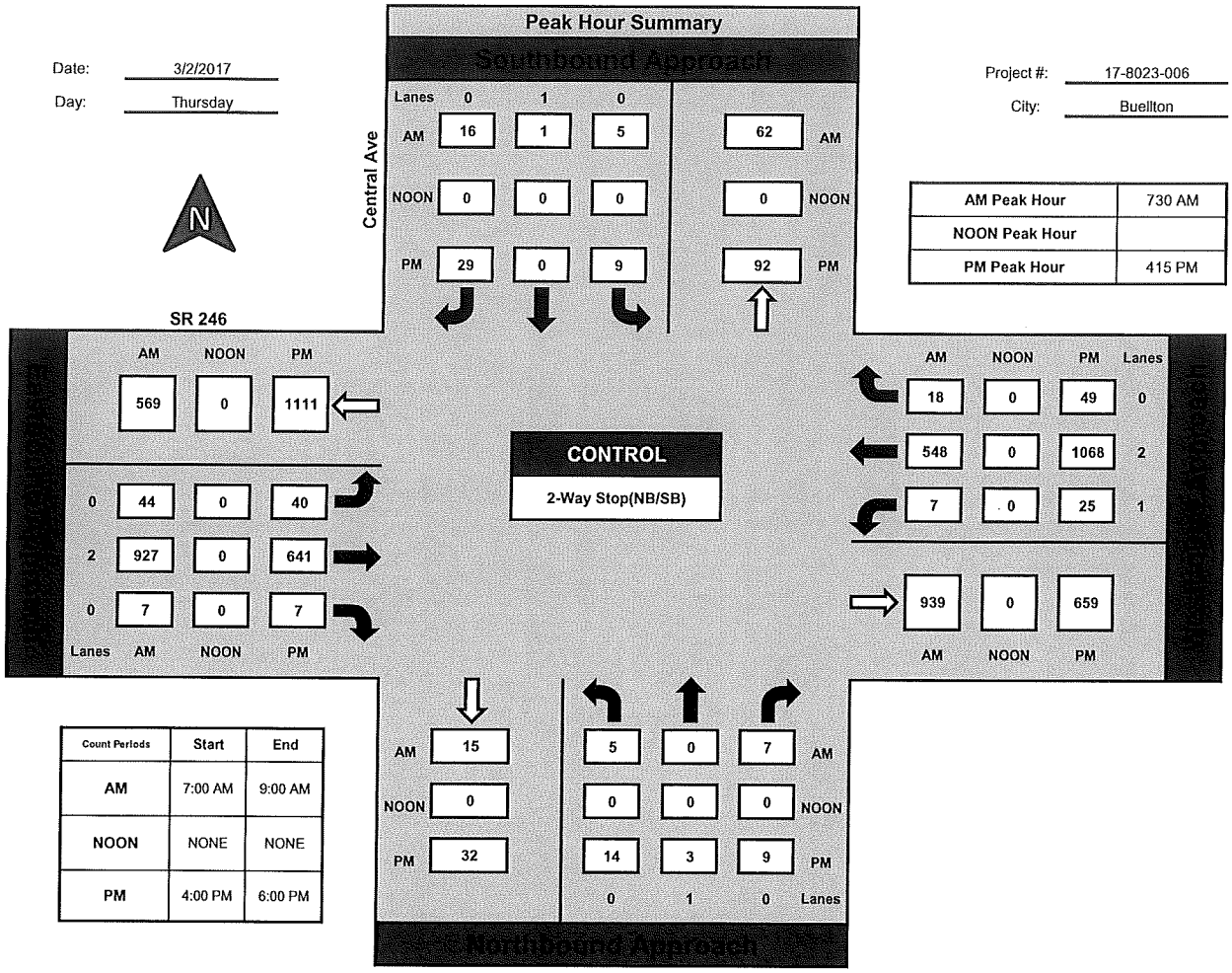
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-006

City: Buellton

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM



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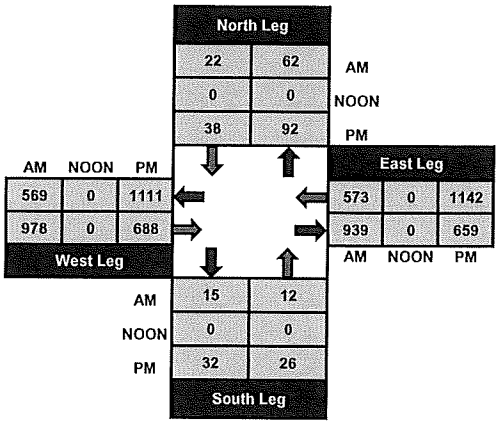

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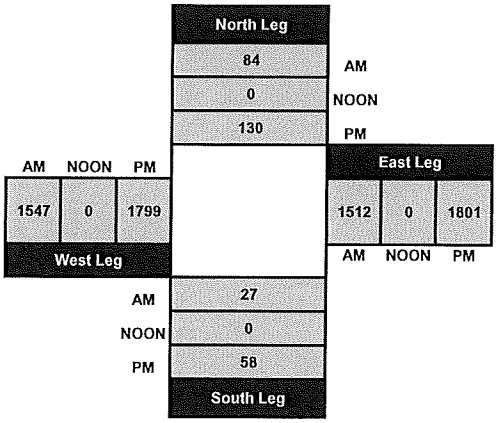

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Central Ave and 2nd St , Buellton

Date: 3/2/2017

Day: Thursday

Project #: 17-8023-005

City: Buellton

AM Peak Hour	730 AM
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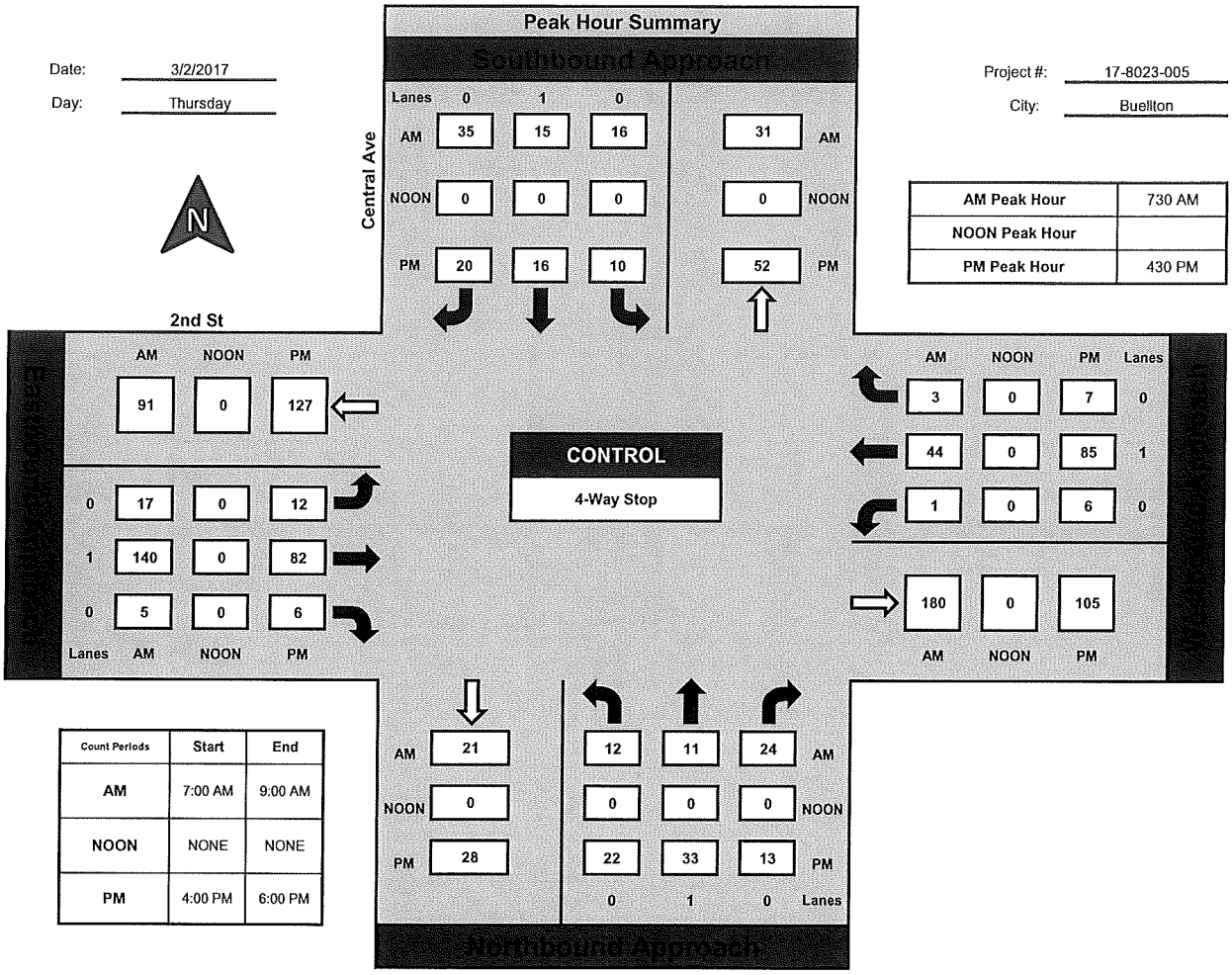
PM Peak Hour	430 PM



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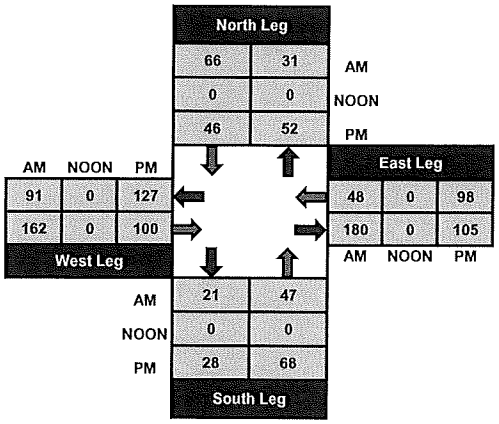
Total Ins & Outs



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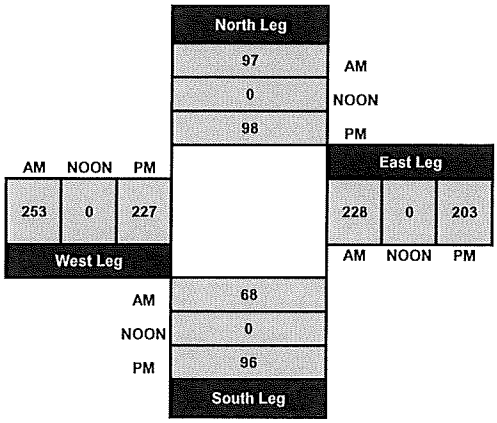


ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Ave Of Flags NB and 2nd St , Buellton

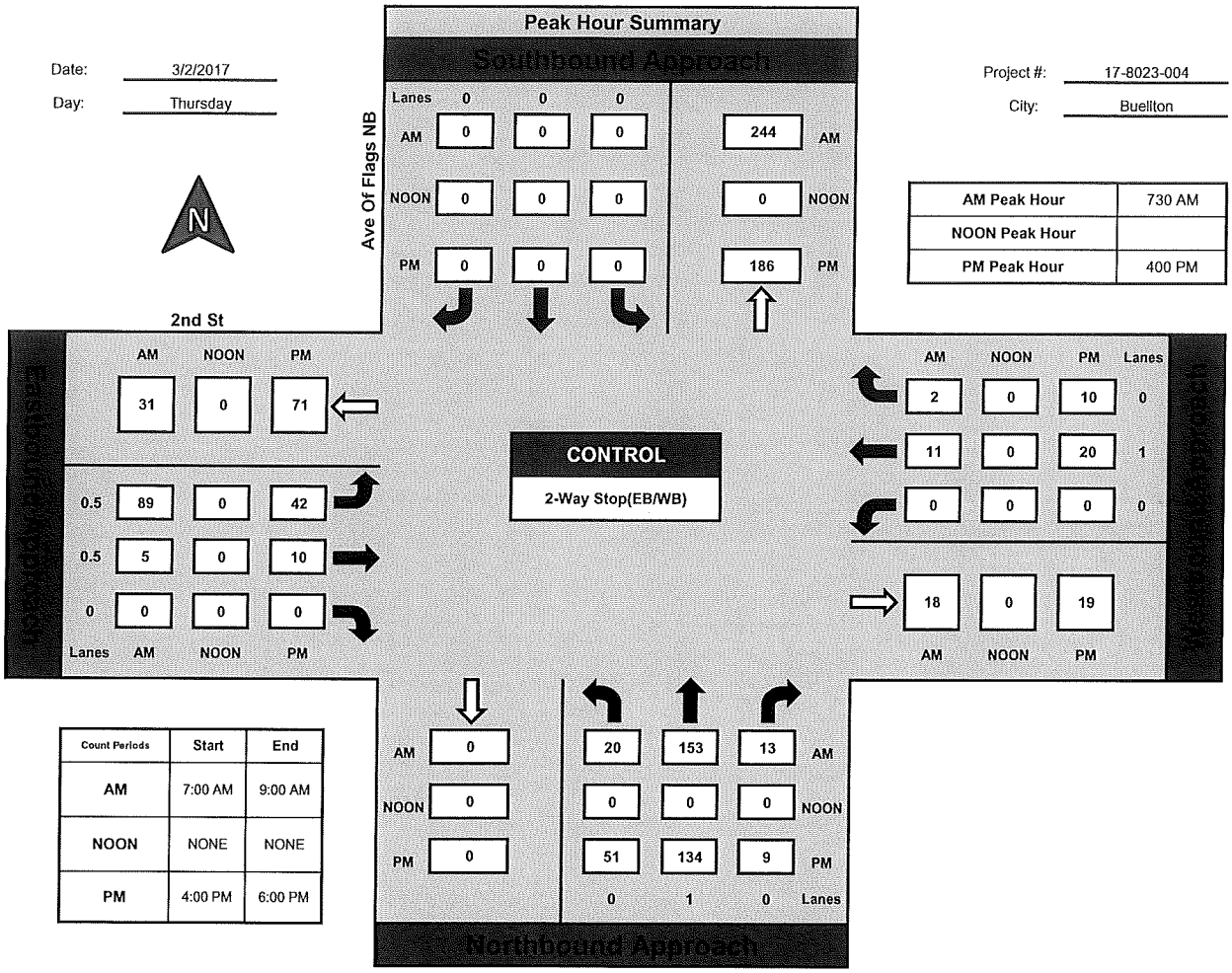
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-004

City: Buellton

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	400 PM



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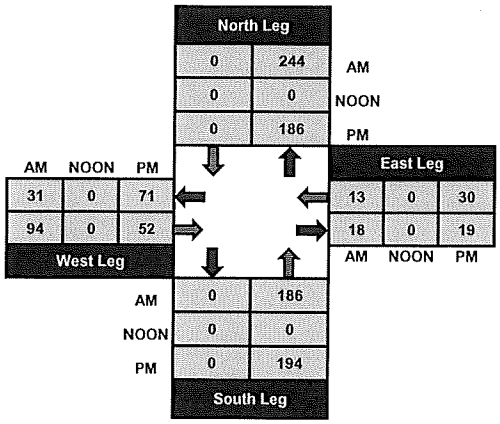

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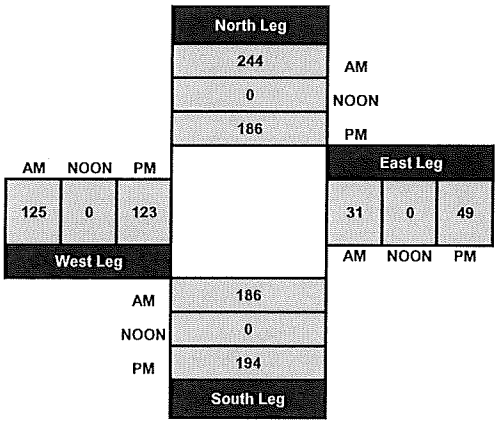


ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Ave Of Flags SB and 2nd St , Buellton

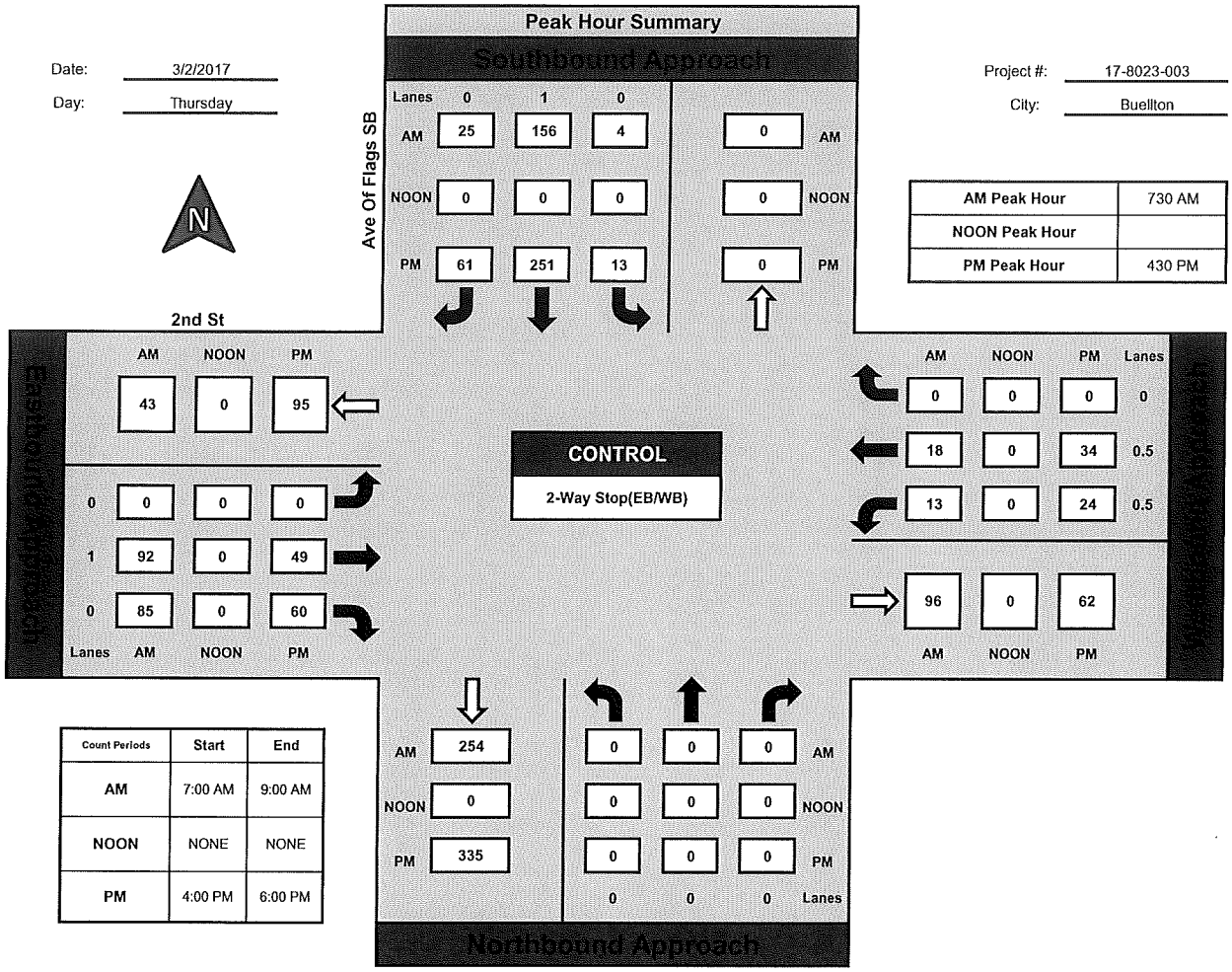
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-003

City: Buellton

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	430 PM



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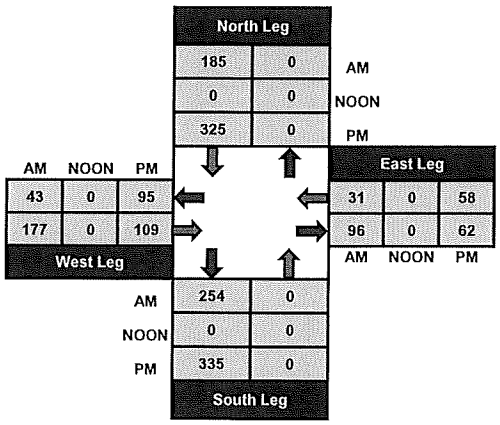

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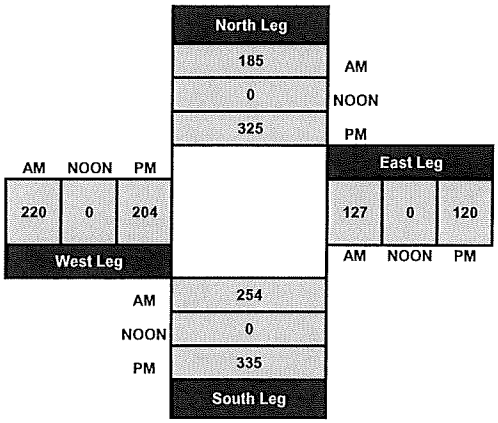


ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Ave Of Flags NB and Damassa Rd , Buellton

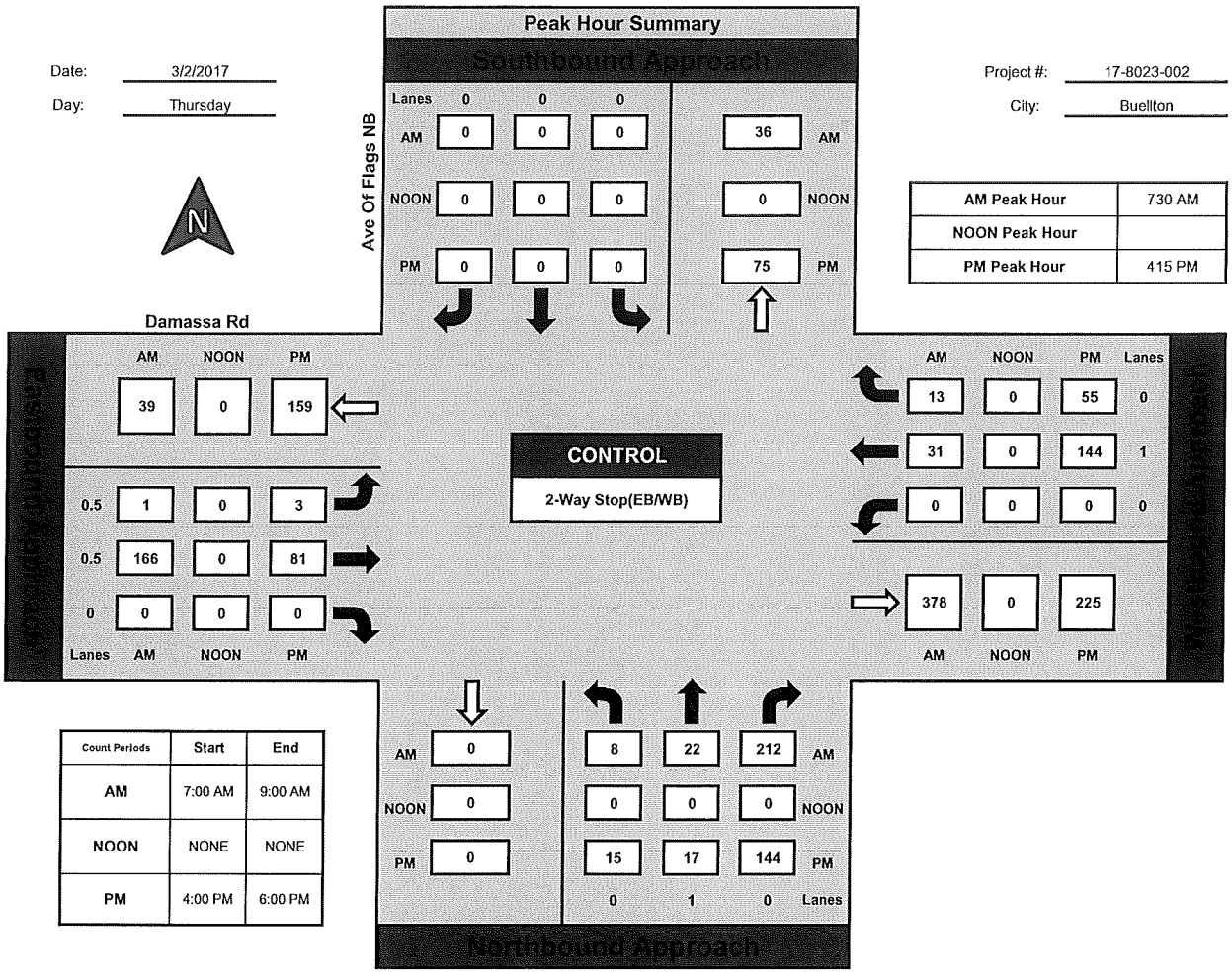
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-002

City: Buellton

AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM



Count Periods	Start	End
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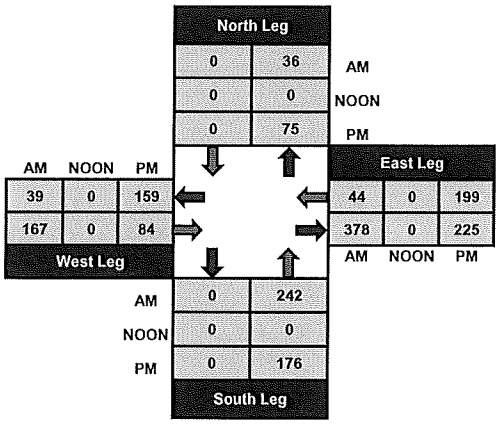
PM	4:00 PM	6:00 PM

Total Ins & Outs



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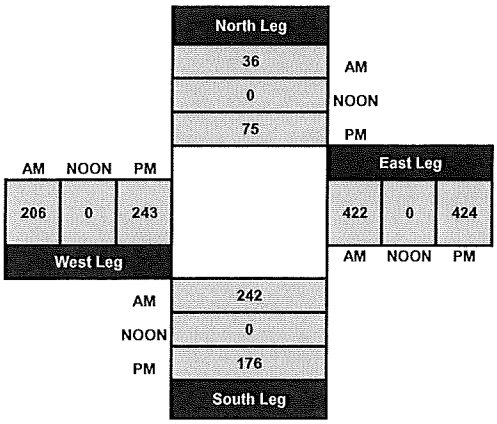


ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Ave Of Flags SB and Damassa Rd , Buellton

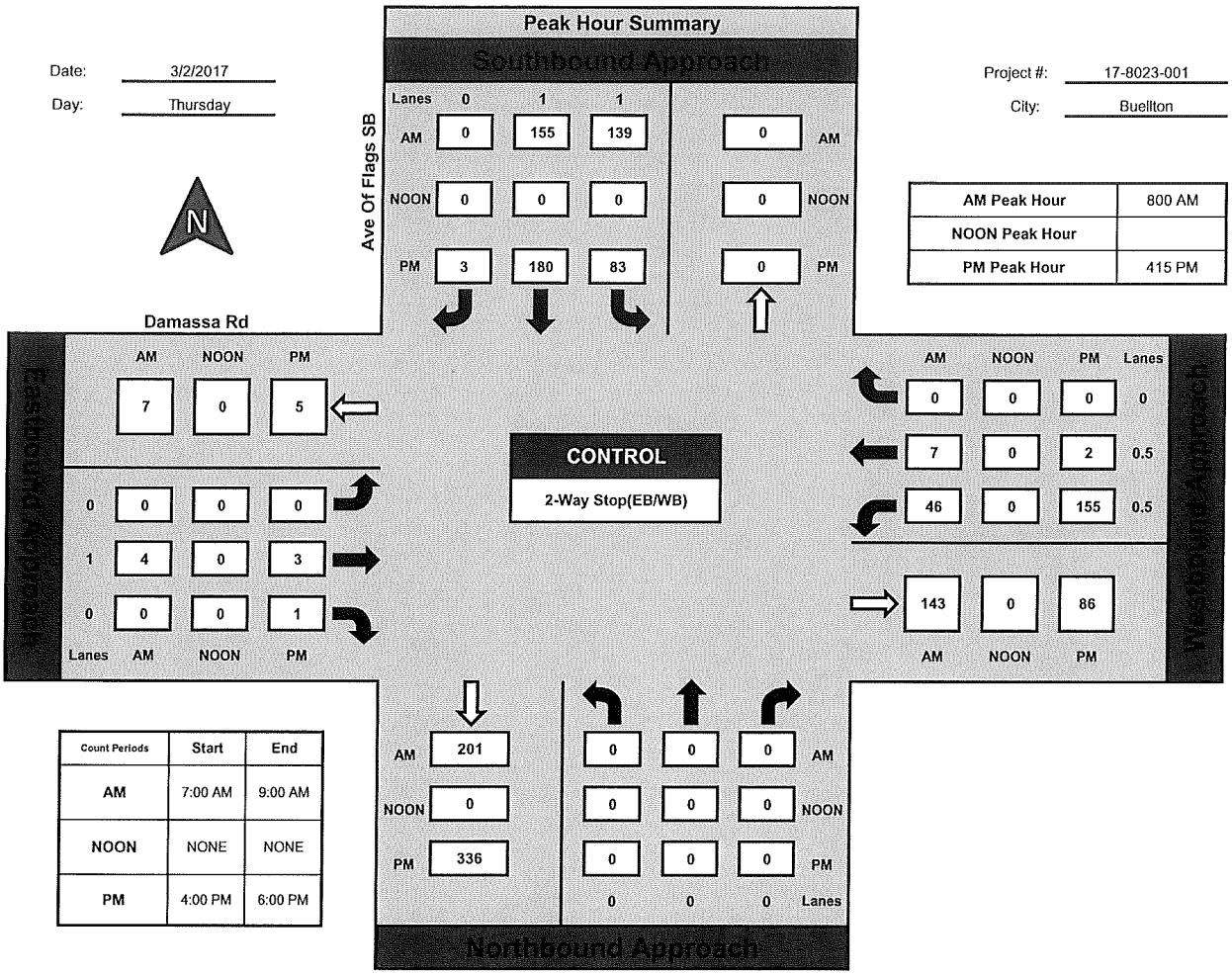
Date: 3/2/2017

Day: Thursday

Project #: 17-8023-001

City: Buellton

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	415 PM



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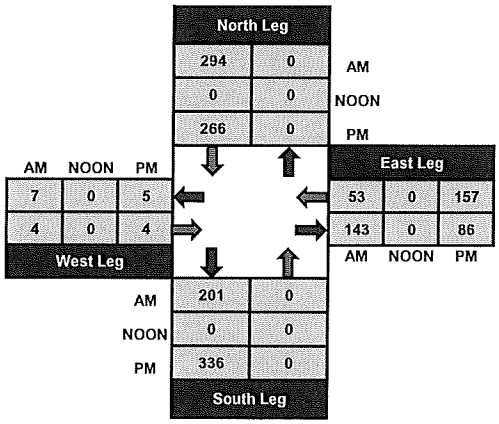
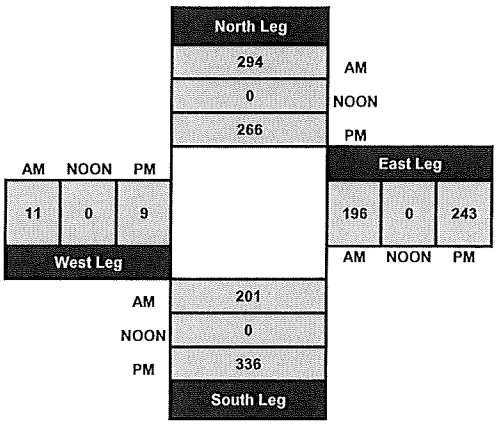
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Prepared by NDS/ATD

VOLUME

Ave of Flags & City Limit

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_013

DAILY TOTALS	NB	SB	EB	WB	Total
	1,307	1,093	0	0	2,400

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		0						3		12:00	31		25						56	
00:15	0		0						0		12:15	17		20						37	
00:30	1		0						1		12:30	28		24						52	
00:45	0	4	1	1					1	5	12:45	14	90	24	93					38	183
01:00	3		0						3		13:00	20		20						40	
01:15	1		0						1		13:15	25		19						44	
01:30	1		0						1		13:30	19		15						34	
01:45	0	5	0						0	5	13:45	21	85	19	73					40	158
02:00	0		1						1		14:00	23		11						34	
02:15	0		0						0		14:15	30		19						49	
02:30	2		0						2		14:30	23		17						40	
02:45	2	4	1	2					3	6	14:45	31	107	15	62					46	169
03:00	0		1						1		15:00	28		19						47	
03:15	0		0						0		15:15	26		13						39	
03:30	1		0						1		15:30	33		14						47	
03:45	0	1	2	3					2	4	15:45	33	120	13	59					46	179
04:00	0		0						0		16:00	42		16						58	
04:15	1		1						2		16:15	50		19						69	
04:30	0		0						0		16:30	38		15						53	
04:45	0	1	2	3					2	4	16:45	43	173	12	62					55	235
05:00	3		2						5		17:00	40		19						59	
05:15	4		6						10		17:15	45		12						57	
05:30	0		9						9		17:30	50		12						62	
05:45	1	8	8	25					9	33	17:45	33	168	12	55					45	223
06:00	3		20						23		18:00	23		9						32	
06:15	4		18						22		18:15	22		2						24	
06:30	10		23						33		18:30	22		2						24	
06:45	6	23	31	92					37	115	18:45	26	93	2	15					28	108
07:00	9		33						42		19:00	14		8						22	
07:15	10		45						55		19:15	6		4						10	
07:30	8		24						32		19:30	7		3						10	
07:45	15	42	35	137					50	179	19:45	11	38	7	22					18	60
08:00	19		30						49		20:00	12		3						15	
08:15	14		35						49		20:15	7		4						11	
08:30	10		24						34		20:30	7		2						9	
08:45	20	63	26	115					46	178	20:45	7	33	2	11					9	44
09:00	17		29						46		21:00	7		5						12	
09:15	13		17						30		21:15	7		4						11	
09:30	14		25						39		21:30	9		3						12	
09:45	14	58	20	91					34	149	21:45	2	25	2	14					4	39
10:00	20		22						42		22:00	2		1						3	
10:15	12		23						35		22:15	5		1						6	
10:30	23		19						42		22:30	2		1						3	
10:45	20	75	13	77					33	152	22:45	0	9	1	4					1	13
11:00	18		25						43		23:00	1		0						1	
11:15	17		15						32		23:15	2		2						4	
11:30	29		17						46		23:30	3		0						3	
11:45	12	76	18	75					30	151	23:45	0	6	0	2					0	8
TOTALS		360		621						981	TOTALS		947		472						1419
SPLIT %		36.7%		63.3%						40.9%	SPLIT %		66.7%		33.3%						59.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,307	1,093	0	0	2,400

AM Peak Hour	11:15	07:00			07:15	PM Peak Hour	16:45	12:00			16:15
AM Pk Volume	89	137			186	PM Pk Volume	178	93			236
Pk Hr Factor	0.718	0.761			0.845	Pk Hr Factor	0.890	0.930			0.855
7 - 9 Volume	105	252	0	0	357	4 - 6 Volume	341	117	0	0	458
7 - 9 Peak Hour	08:00	07:00			07:15	4 - 6 Peak Hour	16:45	16:15			16:15
7 - 9 Pk Volume	63	137	0	0	186	4 - 6 Pk Volume	178	65	0	0	236
Pk Hr Factor	0.788	0.761	0.000	0.000	0.845	Pk Hr Factor	0.890	0.855	0.000	0.000	0.855

Prepared by NDS/ATD

VOLUME

Ave of Flags N/O SR 246

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_012

DAILY TOTALS	NB	SB	EB	WB	Total
	3,243	3,708	0	0	6,951

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		5						6		12:00	48		72						120	
00:15	4		4						8		12:15	47		66						113	
00:30	0		3						3		12:30	51		53						104	
00:45	2	7	1	13					3	20	12:45	50	196	59	250					109	446
01:00	1		1						2		13:00	85		69						154	
01:15	1		1						2		13:15	61		69						130	
01:30	5		1						6		13:30	53		54						107	
01:45	0	7	3	6					3	13	13:45	51	250	72	264					123	514
02:00	1		2						3		14:00	53		64						117	
02:15	1		2						3		14:15	67		61						128	
02:30	1		1						2		14:30	52		62						114	
02:45	1	4	1	6					2	10	14:45	44	216	63	250					107	466
03:00	2		2						4		15:00	77		55						132	
03:15	1		1						2		15:15	68		69						137	
03:30	1		2						3		15:30	69		66						135	
03:45	1	5	2	7					3	12	15:45	71	285	88	278					159	563
04:00	2		2						4		16:00	74		91						165	
04:15	2		0						2		16:15	76		84						160	
04:30	4		3						7		16:30	79		96						175	
04:45	7	15	3	8					10	23	16:45	55	284	74	345					129	629
05:00	1		6						7		17:00	65		77						142	
05:15	8		4						12		17:15	72		89						161	
05:30	2		11						13		17:30	70		84						154	
05:45	20	31	21	42					41	73	17:45	56	263	79	329					135	592
06:00	15		28						43		18:00	43		59						102	
06:15	31		31						62		18:15	52		43						95	
06:30	43		63						106		18:30	63		44						107	
06:45	65	154	59	181					124	335	18:45	35	193	57	203					92	396
07:00	33		43						76		19:00	35		37						72	
07:15	34		63						97		19:15	38		25						63	
07:30	52		55						107		19:30	28		27						55	
07:45	69	188	63	224					132	412	19:45	26	127	19	108					45	235
08:00	51		71						122		20:00	15		24						39	
08:15	48		71						119		20:15	28		24						52	
08:30	60		50						110		20:30	15		13						28	
08:45	61	220	54	246					115	466	20:45	17	75	22	83					39	158
09:00	49		61						110		21:00	24		22						46	
09:15	30		42						72		21:15	18		19						37	
09:30	36		47						83		21:30	7		15						22	
09:45	34	149	61	211					95	360	21:45	21	70	28	84					49	154
10:00	60		71						131		22:00	19		26						45	
10:15	54		54						108		22:15	13		9						22	
10:30	38		51						89		22:30	6		11						17	
10:45	44	196	48	224					92	420	22:45	5	43	5	51					10	94
11:00	51		76						127		23:00	12		9						21	
11:15	47		44						91		23:15	5		4						9	
11:30	59		83						142		23:30	4		6						10	
11:45	80	237	69	272					149	509	23:45	7	28	4	23					11	51
TOTALS		1213		1440						2653	TOTALS		2030		2268						4298
SPLIT %		45.7%		54.3%						38.2%	SPLIT %		47.2%		52.8%						61.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,243	3,708	0	0	6,951

AM Peak Hour	11:00	11:30			11:30	PM Peak Hour	15:45	15:45			15:45
AM Pk Volume	237	290			524	PM Pk Volume	300	359			659
Pk Hr Factor	0.741	0.873			0.879	Pk Hr Factor	0.949	0.935			0.941
7 - 9 Volume	408	470	0	0	878	4 - 6 Volume	547	674	0	0	1221
7 - 9 Peak Hour	07:45	07:30			07:45	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	228	260	0	0	483	4 - 6 Pk Volume	284	345	0	0	629
Pk Hr Factor	0.826	0.915	0.000	0.000	0.915	Pk Hr Factor	0.899	0.898	0.000	0.000	0.899

Prepared by NDS/ATD

VOLUME

Ave of Flags S/O 2nd St

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_011

DAILY TOTALS	NB	SB	EB	WB	Total
	2,293	3,582	0	0	5,875

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		3						4		12:00	28		67						95	
00:15	3		5						8		12:15	29		58						87	
00:30	0		3						3		12:30	37		49						86	
00:45	1	5	1	12					2	17	12:45	37	131	52	226					89	357
01:00	1		1						2		13:00	51		60						111	
01:15	1		1						2		13:15	40		69						109	
01:30	2		1						3		13:30	35		49						84	
01:45	1	5	3	6					4	11	13:45	39	165	62	240					101	405
02:00	1		2						3		14:00	44		59						103	
02:15	1		2						3		14:15	42		60						102	
02:30	1		2						3		14:30	37		57						94	
02:45	0	3	0	6					0	9	14:45	35	158	58	234					93	392
03:00	1		2						3		15:00	51		56						107	
03:15	1		1						2		15:15	52		74						126	
03:30	0		2						2		15:30	58		73						131	
03:45	1	3	2	7					3	10	15:45	49	210	88	291					137	501
04:00	2		2						4		16:00	54		90						144	
04:15	4		0						4		16:15	50		91						141	
04:30	2		3						5		16:30	54		97						151	
04:45	4	12	3	8					7	20	16:45	36	194	71	349					107	543
05:00	2		5						7		17:00	42		75						117	
05:15	7		2						9		17:15	42		82						124	
05:30	0		10						10		17:30	45		84						129	
05:45	18	27	19	36					37	63	17:45	36	165	73	314					109	479
06:00	15		26						41		18:00	32		56						88	
06:15	29		32						61		18:15	32		48						80	
06:30	40		59						99		18:30	30		42						72	
06:45	70	154	58	175					128	329	18:45	29	123	48	194					77	317
07:00	29		40						69		19:00	24		40						64	
07:15	33		63						96		19:15	23		28						51	
07:30	50		58						108		19:30	19		30						49	
07:45	51	163	58	219					109	382	19:45	19	85	22	120					41	205
08:00	51		71						122		20:00	8		22						30	
08:15	42		75						117		20:15	16		15						31	
08:30	42		56						98		20:30	8		17						25	
08:45	36	171	51	253					87	424	20:45	10	42	17	71					27	113
09:00	28		52						80		21:00	15		22						37	
09:15	20		43						63		21:15	13		21						34	
09:30	25		47						72		21:30	6		15						21	
09:45	32	105	62	204					94	309	21:45	11	45	22	80					33	125
10:00	37		65						102		22:00	10		18						28	
10:15	33		50						83		22:15	10		8						18	
10:30	22		47						69		22:30	5		9						14	
10:45	29	121	46	208					75	329	22:45	4	29	4	39					8	68
11:00	32		66						98		23:00	7		10						17	
11:15	35		40						75		23:15	3		4						7	
11:30	37		87						124		23:30	5		8						13	
11:45	52	156	70	263					122	419	23:45	6	21	5	27					11	48
TOTALS		925		1397						2322	TOTALS		1368		2185						3553
SPLIT %		39.8%		60.2%						39.5%	SPLIT %		38.5%		61.5%						60.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,293	3,582	0	0	5,875

AM Peak Hour	07:30	11:30			07:30	PM Peak Hour	15:15	15:45			15:45
AM Pk Volume	194	282			456	PM Pk Volume	213	366			573
Pk Hr Factor	0.951	0.810			0.934	Pk Hr Factor	0.918	0.943			0.949
7 - 9 Volume	334	472	0	0	806	4 - 6 Volume	359	663	0	0	1022
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	194	262	0	0	456	4 - 6 Pk Volume	194	349	0	0	543
Pk Hr Factor	0.951	0.873	0.000	0.000	0.934	Pk Hr Factor	0.898	0.899	0.000	0.000	0.899

Prepared by NDS/ATD

VOLUME

Central Ave N/O 2nd St

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_009

DAILY TOTALS	NB	SB	EB	WB	Total
	358	392	0	0	750

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	5		7						12	
00:15	0		0						0		12:15	7		8						15	
00:30	0		0						0		12:30	10		8						18	
00:45	0		0						0		12:45	2	24	7	30					9	54
01:00	0		0						0		13:00	4		8						12	
01:15	0		0						0		13:15	4		7						11	
01:30	0		0						0		13:30	3		1						4	
01:45	0		0						0		13:45	8	19	3	19					11	38
02:00	0		0						0		14:00	8		6						14	
02:15	1		0						1		14:15	6		4						10	
02:30	0		0						0		14:30	14		6						20	
02:45	0	1	0						0	1	14:45	2	30	7	23					9	53
03:00	0		0						0		15:00	12		9						21	
03:15	0		0						0		15:15	6		8						14	
03:30	1		0						1		15:30	7		18						25	
03:45	0	1	1	1					1	2	15:45	7	32	5	40					12	72
04:00	1		0						1		16:00	6		9						15	
04:15	0		0						0		16:15	9		12						21	
04:30	0		0						0		16:30	12		16						28	
04:45	0	1	1	1					1	2	16:45	11	38	5	42					16	80
05:00	0		2						2		17:00	13		10						23	
05:15	0		0						0		17:15	9		9						18	
05:30	0		0						0		17:30	14		9						23	
05:45	0		1	3					1	3	17:45	5	41	15	43					20	84
06:00	0		0						0		18:00	7		4						11	
06:15	0		0						0		18:15	5		7						12	
06:30	1		3						4		18:30	5		8						13	
06:45	4	5	1	4					5	9	18:45	4	21	8	27					12	48
07:00	0		1						1		19:00	6		4						10	
07:15	0		0						0		19:15	5		6						11	
07:30	1		3						4		19:30	5		5						10	
07:45	1	2	6	10					7	12	19:45	3	19	5	20					8	39
08:00	7		20						27		20:00	5		2						7	
08:15	11		11						22		20:15	2		2						4	
08:30	8		7						15		20:30	1		2						3	
08:45	10	36	5	43					15	79	20:45	4	12	0	6					4	18
09:00	4		3						7		21:00	4		3						7	
09:15	7		5						12		21:15	1		1						2	
09:30	5		7						12		21:30	2		0						2	
09:45	7	23	8	23					15	46	21:45	3	10	5	9					8	19
10:00	5		5						10		22:00	2		2						4	
10:15	6		7						13		22:15	0		1						1	
10:30	5		4						9		22:30	2		2						4	
10:45	1	17	6	22					7	39	22:45	0	4	1	6					1	10
11:00	2		8						10		23:00	1		0						1	
11:15	4		5						9		23:15	0		0						0	
11:30	9		2						11		23:30	1		0						1	
11:45	5	20	5	20					10	40	23:45	0	2	0						0	2
TOTALS		106		127						233	TOTALS		252		265						517
SPLIT %		45.5%		54.5%						31.1%	SPLIT %		48.7%		51.3%						68.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	358	392	0	0	750

AM Peak Hour	08:00	07:45			08:00	PM Peak Hour	16:45	15:30			16:15
AM Pk Volume	36	44			79	PM Pk Volume	47	44			88
Pk Hr Factor	0.818	0.550			0.731	Pk Hr Factor	0.839	0.611			0.786
7 - 9 Volume	38	53	0	0	91	4 - 6 Volume	79	85	0	0	164
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	16:45	16:15			16:15
7 - 9 Pk Volume	36	44	0	0	79	4 - 6 Pk Volume	47	43	0	0	88
Pk Hr Factor	0.818	0.550	0.000	0.000	0.731	Pk Hr Factor	0.839	0.672	0.000	0.000	0.786

Prepared by NDS/ATD

VOLUME

2nd St W/O Ave of Flags

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,253	711	1,964

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00					0		1		1		12:00					16		8		24	
00:15					1		0		1		12:15					21		14		35	
00:30					0		0		0		12:30					24		15		39	
00:45					1	2	1	2	2	4	12:45					18	79	12	49	30	128
01:00					0		0		0		13:00					13		10		23	
01:15					0		1		1		13:15					20		14		34	
01:30					0		1		1		13:30					19		9		28	
01:45					0		0	2	0	2	13:45					15	67	8	41	23	108
02:00					0		0		0		14:00					19		17		36	
02:15					1		1		2		14:15					14		15		29	
02:30					0		0		0		14:30					21		12		33	
02:45					0	1	0	1	0	2	14:45					17	71	16	60	33	131
03:00					0		0		0		15:00					25		16		41	
03:15					0		1		1		15:15					35		15		50	
03:30					0		0		0		15:30					14		10		24	
03:45					0		0	1	0	1	15:45					15	89	16	57	31	146
04:00					2		0		2		16:00					22		20		42	
04:15					0		0		0		16:15					18		18		36	
04:30					2		0		2		16:30					31		24		55	
04:45					1	5	1	1	2	6	16:45					21	92	23	85	44	177
05:00					2		0		2		17:00					21		19		40	
05:15					2		0		2		17:15					29		25		54	
05:30					3		1		4		17:30					30		23		53	
05:45					9	16	0	1	9	17	17:45					21	101	23	90	44	191
06:00					6		1		7		18:00					32		21		53	
06:15					15		0		15		18:15					17		16		33	
06:30					27		4		31		18:30					22		20		42	
06:45					25	73	3	8	28	81	18:45					18	89	21	78	39	167
07:00					19		3		22		19:00					23		14		37	
07:15					27		0		27		19:15					8		9		17	
07:30					48		4		52		19:30					17		5		22	
07:45					32	126	10	17	42	143	19:45					12	60	7	35	19	95
08:00					43		21		64		20:00					6		3		9	
08:15					49		7		56		20:15					11		7		18	
08:30					32		5		37		20:30					6		6		12	
08:45					19	143	8	41	27	184	20:45					4	27	6	22	10	49
09:00					7		9		16		21:00					3		4		7	
09:15					13		9		22		21:15					7		5		12	
09:30					16		8		24		21:30					3		4		7	
09:45					10	46	9	35	19	81	21:45					5	18	4	17	9	35
10:00					18		5		23		22:00					4		1		5	
10:15					19		7		26		22:15					5		3		8	
10:30					16		3		19		22:30					3		1		4	
10:45					13	66	8	23	21	89	22:45					0	12	3	8	3	20
11:00					16		5		21		23:00					1		1		2	
11:15					13		8		21		23:15					2		4		6	
11:30					17		10		27		23:30					2		1		3	
11:45					19	65	5	28	24	93	23:45					0	5	3	9	3	14
TOTALS						543		160		703	TOTALS						710		551		1261
SPLIT %						77.2%		22.8%		35.8%	SPLIT %						56.3%		43.7%		64.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,253	711	1,964

AM Peak Hour			07:30	07:45	07:30	PM Peak Hour			17:15	17:15	17:15
AM Pk Volume			172	43	214	PM Pk Volume			112	92	204
Pk Hr Factor			0.878	0.512	0.836	Pk Hr Factor			0.875	0.920	0.944
7 - 9 Volume	0	0	269	58	327	4 - 6 Volume	0	0	193	175	368
7 - 9 Peak Hour			07:30	07:45	07:30	4 - 6 Peak Hour			16:30	16:30	16:30
7 - 9 Pk Volume	0	0	172	43	214	4 - 6 Pk Volume	0	0	102	91	193
Pk Hr Factor	0.000	0.000	0.878	0.512	0.836	Pk Hr Factor	0.000	0.000	0.823	0.910	0.877

Prepared by NDS/ATD

VOLUME

Ave of Flags N/O 2nd St

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_007

DAILY TOTALS	NB	SB	EB	WB	Total
	2,435	3,387	0	0	5,822

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		5						5		12:00	29		59						88	
00:15	3		3						6		12:15	34		59						93	
00:30	0		3						3		12:30	49		49						98	
00:45	0	3	2	13					2	16	12:45	40	152	60	227					100	379
01:00	0		1						1		13:00	47		63						110	
01:15	0		0						0		13:15	42		65						107	
01:30	2		3						5		13:30	34		43						77	
01:45	2	4	2	6					4	10	13:45	38	161	59	230					97	391
02:00	1		3						4		14:00	41		59						100	
02:15	1		2						3		14:15	35		62						97	
02:30	1		2						3		14:30	44		52						96	
02:45	0	3	0	7					0	10	14:45	35	155	60	233					95	388
03:00	1		4						5		15:00	41		47						88	
03:15	0		1						1		15:15	57		64						121	
03:30	0		2						2		15:30	57		76						133	
03:45	1	2	2	9					3	11	15:45	45	200	92	279					137	479
04:00	1		2						3		16:00	50		85						135	
04:15	6		0						6		16:15	47		85						132	
04:30	2		2						4		16:30	49		100						149	
04:45	5	14	3	7					8	21	16:45	36	182	82	352					118	534
05:00	3		2						5		17:00	41		87						128	
05:15	8		3						11		17:15	50		94						144	
05:30	6		6						12		17:30	42		88						130	
05:45	23	40	16	27					39	67	17:45	35	168	83	352					118	520
06:00	17		22						39		18:00	31		55						86	
06:15	37		22						59		18:15	29		41						70	
06:30	53		35						88		18:30	29		57						86	
06:45	83	190	45	124					128	314	18:45	27	116	56	209					83	325
07:00	38		39						77		19:00	25		37						62	
07:15	45		47						92		19:15	14		23						37	
07:30	69		30						99		19:30	21		24						45	
07:45	57	209	41	157					98	366	19:45	17	77	16	100					33	177
08:00	67		67						134		20:00	9		21						30	
08:15	64		54						118		20:15	13		11						24	
08:30	65		52						117		20:30	6		18						24	
08:45	43	239	47	220					90	459	20:45	7	35	16	66					23	101
09:00	30		51						81		21:00	12		26						38	
09:15	26		48						74		21:15	14		17						31	
09:30	27		43						70		21:30	3		19						22	
09:45	38	121	70	212					108	333	21:45	8	37	19	81					27	118
10:00	37		57						94		22:00	11		17						28	
10:15	43		50						93		22:15	9		8						17	
10:30	22		39						61		22:30	3		7						10	
10:45	31	133	42	188					73	321	22:45	1	24	5	37					6	61
11:00	29		56						85		23:00	1		5						6	
11:15	35		37						72		23:15	2		4						6	
11:30	40		72						112		23:30	4		6						10	
11:45	56	160	66	231					122	391	23:45	3	10	5	20					8	30
TOTALS		1118		1201						2319	TOTALS		1317		2186						3503
SPLIT %		48.2%		51.8%						39.8%	SPLIT %		37.6%		62.4%						60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,435	3,387	0	0	5,822

AM Peak Hour	07:30	11:30			07:45	PM Peak Hour	15:15	16:30			15:45
AM Pk Volume	257	256			467	PM Pk Volume	209	363			553
Pk Hr Factor	0.931	0.889			0.871	Pk Hr Factor	0.917	0.908			0.928
7 - 9 Volume	448	377	0	0	825	4 - 6 Volume	350	704	0	0	1054
7 - 9 Peak Hour	07:30	08:00			07:45	4 - 6 Peak Hour	16:00	16:30			16:30
7 - 9 Pk Volume	257	220	0	0	467	4 - 6 Pk Volume	182	363	0	0	539
Pk Hr Factor	0.931	0.821	0.000	0.000	0.871	Pk Hr Factor	0.910	0.908	0.000	0.000	0.904

Prepared by NDS/ATD

VOLUME

Ave of Flags S/O Damassa Rd

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_006

DAILY TOTALS	NB	SB	EB	WB	Total
	2,413	3,122	0	0	5,535

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		5						5		12:00	33		55						88	
00:15	3		3						6		12:15	30		48						78	
00:30	0		3						3		12:30	45		43						88	
00:45	0	3	1	12					1	15	12:45	38	146	56	202					94	348
01:00	0		2						2		13:00	50		58						108	
01:15	0		0						0		13:15	43		60						103	
01:30	2		3						5		13:30	31		41						72	
01:45	2	4	2	7					4	11	13:45	38	162	51	210					89	372
02:00	1		3						4		14:00	39		49						88	
02:15	1		2						3		14:15	36		53						89	
02:30	1		2						3		14:30	38		57						95	
02:45	0	3	0	7					0	10	14:45	40	153	59	218					99	371
03:00	1		4						5		15:00	39		35						74	
03:15	0		2						2		15:15	53		55						108	
03:30	1		1						2		15:30	55		75						130	
03:45	1	3	2	9					3	12	15:45	43	190	86	251					129	441
04:00	1		2						3		16:00	52		81						133	
04:15	6		0						6		16:15	48		82						130	
04:30	2		2						4		16:30	45		94						139	
04:45	6	15	3	7					9	22	16:45	35	180	75	332					110	512
05:00	3		2						5		17:00	40		80						120	
05:15	9		3						12		17:15	49		78						127	
05:30	6		7						13		17:30	43		70						113	
05:45	26	44	17	29					43	73	17:45	36	168	74	302					110	470
06:00	16		19						35		18:00	33		46						79	
06:15	40		20						60		18:15	27		41						68	
06:30	50		31						81		18:30	31		47						78	
06:45	86	192	43	113					129	305	18:45	26	117	53	187					79	304
07:00	39		40						79		19:00	22		33						55	
07:15	48		44						92		19:15	15		22						37	
07:30	64		29						93		19:30	21		21						42	
07:45	57	208	37	150					94	358	19:45	18	76	16	92					34	168
08:00	63		64						127		20:00	9		23						32	
08:15	62		46						108		20:15	14		9						23	
08:30	65		47						112		20:30	7		15						22	
08:45	47	237	55	212					102	449	20:45	6	36	15	62					21	98
09:00	32		45						77		21:00	12		23						35	
09:15	29		44						73		21:15	13		17						30	
09:30	27		45						72		21:30	3		16						19	
09:45	39	127	68	202					107	329	21:45	11	39	22	78					33	117
10:00	35		50						85		22:00	9		12						21	
10:15	37		40						77		22:15	9		8						17	
10:30	23		39						62		22:30	2		6						8	
10:45	29	124	43	172					72	296	22:45	0	20	6	32					6	52
11:00	27		48						75		23:00	1		5						6	
11:15	35		40						75		23:15	1		4						5	
11:30	42		65						107		23:30	5		7						12	
11:45	52	156	62	215					114	371	23:45	3	10	5	21					8	31
TOTALS		1116		1135						2251	TOTALS		1297		1987						3284
SPLIT %		49.6%		50.4%						40.7%	SPLIT %		39.5%		60.5%						59.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,413	3,122	0	0	5,535

AM Peak Hour	07:45	11:30			08:00	PM Peak Hour	15:15	15:45			15:45
AM Pk Volume	247	230			449	PM Pk Volume	203	343			531
Pk Hr Factor	0.950	0.885			0.884	Pk Hr Factor	0.923	0.912			0.955
7 - 9 Volume	445	362	0	0	807	4 - 6 Volume	348	634	0	0	982
7 - 9 Peak Hour	07:45	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	247	212	0	0	449	4 - 6 Pk Volume	180	332	0	0	512
Pk Hr Factor	0.950	0.828	0.000	0.000	0.884	Pk Hr Factor	0.865	0.883	0.000	0.000	0.921

Prepared by NDS/ATD

VOLUME

Ave of Flags S/O Central Ave

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_004

DAILY TOTALS	NB	SB	EB	WB	Total
	867	3,245	0	0	4,112

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	1		4						5		12:00	19		45						64	
00:15	6		6						12		12:15	9		45						54	
00:30	0		5						5		12:30	19		49						68	
00:45	0	7	1	16					1	23	12:45	12	59	56	195					68	254
01:00	0		6						6		13:00	22		51						73	
01:15	0		0						0		13:15	24		41						65	
01:30	2		5						7		13:30	10		43						53	
01:45	2	4	2	13					4	17	13:45	16	72	49	184					65	256
02:00	0		2						2		14:00	23		44						67	
02:15	0		4						4		14:15	19		56						75	
02:30	0		1						1		14:30	20		56						76	
02:45	0		0	7					0	7	14:45	14	76	45	201					59	277
03:00	0		3						3		15:00	11		34						45	
03:15	0		1						1		15:15	14		54						68	
03:30	1		6						7		15:30	11		56						67	
03:45	3	4	6	16					9	20	15:45	17	53	81	225					98	278
04:00	0		4						4		16:00	15		67						82	
04:15	1		1						2		16:15	22		61						83	
04:30	2		5						7		16:30	19		71						90	
04:45	3	6	2	12					5	18	16:45	11	67	66	265					77	332
05:00	0		8						8		17:00	19		56						75	
05:15	3		5						8		17:15	24		64						88	
05:30	2		16						18		17:30	14		54						68	
05:45	8	13	35	64					43	77	17:45	18	75	63	237					81	312
06:00	3		31						34		18:00	10		45						55	
06:15	4		31						35		18:15	12		35						47	
06:30	8		45						53		18:30	15		35						50	
06:45	5	20	77	184					82	204	18:45	8	45	45	160					53	205
07:00	7		60						67		19:00	9		29						38	
07:15	7		75						82		19:15	10		24						34	
07:30	4		71						75		19:30	9		19						28	
07:45	7	25	76	282					83	307	19:45	9	37	12	84					21	121
08:00	9		83						92		20:00	14		14						28	
08:15	10		71						81		20:15	9		10						19	
08:30	12		76						88		20:30	7		14						21	
08:45	16	47	68	298					84	345	20:45	7	37	8	46					15	83
09:00	6		45						51		21:00	7		17						24	
09:15	17		50						67		21:15	7		18						25	
09:30	8		53						61		21:30	6		12						18	
09:45	13	44	64	212					77	256	21:45	13	33	25	72					38	105
10:00	9		64						73		22:00	6		14						20	
10:15	13		50						63		22:15	5		5						10	
10:30	7		42						49		22:30	2		11						13	
10:45	16	45	40	196					56	241	22:45	1	14	4	34					5	48
11:00	22		53						75		23:00	0		4						4	
11:15	19		45						64		23:15	1		4						5	
11:30	19		69						88		23:30	2		6						8	
11:45	19	79	58	225					77	304	23:45	2	5	3	17					5	22
TOTALS		294		1525						1819	TOTALS		573		1720						2293
SPLIT %		16.2%		83.8%						44.2%	SPLIT %		25.0%		75.0%						55.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	867	3,245	0	0	4,112

AM Peak Hour	11:00	07:45			08:00	PM Peak Hour	13:45	15:45			15:45
AM Pk Volume	79	306			345	PM Pk Volume	78	280			353
Pk Hr Factor	0.898	0.922			0.938	Pk Hr Factor	0.848	0.864			0.901
7 - 9 Volume	72	580	0	0	652	4 - 6 Volume	142	502	0	0	644
7 - 9 Peak Hour	08:00	07:45			08:00	4 - 6 Peak Hour	17:00	16:00			16:00
7 - 9 Pk Volume	47	306	0	0	345	4 - 6 Pk Volume	75	265	0	0	332
Pk Hr Factor	0.734	0.922	0.000	0.000	0.938	Pk Hr Factor	0.781	0.933	0.000	0.000	0.922

Prepared by NDS/ATD

VOLUME

Central Ave S/O Ave of Flags

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_003

DAILY TOTALS	NB	SB	EB	WB	Total
	254	372	0	0	626

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0		12:00	7		7						14	
00:15	0		1						1		12:15	5		2						7	
00:30	2		2						4		12:30	5		2						7	
00:45	0	2	0	3					0	5	12:45	0	17	1	12					1	29
01:00	0		1						1		13:00	2		5						7	
01:15	0		0						0		13:15	2		8						10	
01:30	0		0						0		13:30	4		3						7	
01:45	0		0	1					0	1	13:45	4	12	4	20					8	32
02:00	0		1						1		14:00	3		6						9	
02:15	0		0						0		14:15	2		5						7	
02:30	0		0						0		14:30	3		4						7	
02:45	0		0	1					0	1	14:45	6	14	2	17					8	31
03:00	0		0						0		15:00	5		6						11	
03:15	0		2						2		15:15	2		7						9	
03:30	0		2						2		15:30	4		11						15	
03:45	0		0	4					0	4	15:45	4	15	4	28					8	43
04:00	1		0						1		16:00	4		9						13	
04:15	0		0						0		16:15	3		12						15	
04:30	0		2						2		16:30	5		12						17	
04:45	0	1	2	4					2	5	16:45	7	19	2	35					9	54
05:00	0		1						1		17:00	4		16						20	
05:15	1		1						2		17:15	6		10						16	
05:30	2		1						3		17:30	5		7						12	
05:45	2	5	7	10					9	15	17:45	3	18	11	44					14	62
06:00	3		1						4		18:00	7		9						16	
06:15	4		1						5		18:15	2		10						12	
06:30	2		3						5		18:30	6		8						14	
06:45	8	17	2	7					10	24	18:45	1	16	5	32					6	48
07:00	5		4						9		19:00	3		3						6	
07:15	5		3						8		19:15	1		10						11	
07:30	2		3						5		19:30	1		5						6	
07:45	5	17	3	13					8	30	19:45	3	8	8	26					11	34
08:00	5		9						14		20:00	5		2						7	
08:15	9		4						13		20:15	1		3						4	
08:30	9		5						14		20:30	1		3						4	
08:45	4	27	1	19					5	46	20:45	3	10	1	9					4	19
09:00	3		1						4		21:00	2		3						5	
09:15	4		5						9		21:15	0		2						2	
09:30	7		4						11		21:30	1		4						5	
09:45	3	17	3	13					6	30	21:45	2	5	4	13					6	18
10:00	3		9						12		22:00	2		6						8	
10:15	4		5						9		22:15	0		2						2	
10:30	6		4						10		22:30	0		1						1	
10:45	4	17	5	23					9	40	22:45	0	2	2	11					2	13
11:00	3		11						14		23:00	0		0						0	
11:15	2		5						7		23:15	1		1						2	
11:30	2		4						6		23:30	0		0						0	
11:45	7	14	6	26					13	40	23:45	0	1	0	1					0	2
TOTALS		117		124						241	TOTALS		137		248						385
SPLIT %		48.5%		51.5%						38.5%	SPLIT %		35.6%		64.4%						61.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	254	372	0	0	626

AM Peak Hour	07:45	11:00			07:45	PM Peak Hour	16:30	17:00			16:30
AM Pk Volume	28	26			49	PM Pk Volume	22	44			62
Pk Hr Factor	0.778	0.591			0.875	Pk Hr Factor	0.786	0.688			0.775
7 - 9 Volume	44	32	0	0	76	4 - 6 Volume	37	79	0	0	116
7 - 9 Peak Hour	07:45	07:45			07:45	4 - 6 Peak Hour	16:30	17:00			16:30
7 - 9 Pk Volume	28	21	0	0	49	4 - 6 Pk Volume	22	44	0	0	62
Pk Hr Factor	0.778	0.583	0.000	0.000	0.875	Pk Hr Factor	0.786	0.688	0.000	0.000	0.775

Prepared by NDS/ATD

VOLUME

Jonata Rd N/O Ave of Flags

Day: Thursday
Date: 3/2/2017

City: Buellton
Project #: CA17_8022_002

DAILY TOTALS	NB	SB	EB	WB	Total
	511	550	0	0	1,061

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	0		1						1		12:00	9		5						14	
00:15	1		0						1		12:15	11		10						21	
00:30	0		1						1		12:30	18		12						30	
00:45	0	1	0	2					0	3	12:45	4	42	13	40					17	82
01:00	1		1						2		13:00	9		16						25	
01:15	0		0						0		13:15	13		9						22	
01:30	1		0						1		13:30	3		7						10	
01:45	0	2	0	1					0	3	13:45	6	31	11	43					17	74
02:00	0		1						1		14:00	19		6						25	
02:15	2		0						2		14:15	11		13						24	
02:30	0		1						1		14:30	12		11						23	
02:45	1	3	0	2					1	5	14:45	11	53	4	34					15	87
03:00	0		1						1		15:00	7		5						12	
03:15	0		0						0		15:15	9		13						22	
03:30	2		0						2		15:30	8		14						22	
03:45	1	3	1	2					2	5	15:45	13	37	12	44					25	81
04:00	1		0						1		16:00	9		13						22	
04:15	0		0						0		16:15	16		10						26	
04:30	1		1						2		16:30	9		13						22	
04:45	1	3	0	1					1	4	16:45	12	46	4	40					16	86
05:00	2		2						4		17:00	13		11						24	
05:15	2		1						3		17:15	11		11						22	
05:30	2		0						2		17:30	12		7						19	
05:45	2	8	4	7					6	15	17:45	5	41	13	42					18	83
06:00	2		2						4		18:00	2		6						8	
06:15	3		2						5		18:15	5		7						12	
06:30	6		9						15		18:30	11		7						18	
06:45	8	19	4	17					12	36	18:45	3	21	6	26					9	47
07:00	11		13						24		19:00	5		5						10	
07:15	6		8						14		19:15	3		3						6	
07:30	3		12						15		19:30	4		1						5	
07:45	3	23	6	39					9	62	19:45	3	15	3	12					6	27
08:00	5		21						26		20:00	7		6						13	
08:15	9		17						26		20:15	5		1						6	
08:30	8		11						19		20:30	2		1						3	
08:45	9	31	11	60					20	91	20:45	7	21	2	10					9	31
09:00	7		4						11		21:00	3		0						3	
09:15	8		3						11		21:15	1		3						4	
09:30	4		10						14		21:30	2		1						3	
09:45	9	28	11	28					20	56	21:45	3	9	1	5					4	14
10:00	6		17						23		22:00	3		2						5	
10:15	4		8						12		22:15	0		0						0	
10:30	2		7						9		22:30	1		1						2	
10:45	8	20	10	42					18	62	22:45	0	4	1	4					1	8
11:00	11		13						24		23:00	0		1						1	
11:15	11		11						22		23:15	1		0						1	
11:30	12		6						18		23:30	1		0						1	
11:45	14	48	18	48					32	96	23:45	0	2	0	1					0	3
TOTALS	189		249							438	TOTALS	322		301							623
SPLIT %	43.2%		56.8%							41.3%	SPLIT %	51.7%		48.3%							58.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	511	550	0	0	1,061

AM Peak Hour	11:45	08:00			11:45	PM Peak Hour	14:00	15:15			15:30
AM Pk Volume	52	60			97	PM Pk Volume	53	52			95
Pk Hr Factor	0.722	0.714			0.758	Pk Hr Factor	0.697	0.929			0.913
7 - 9 Volume	54	99	0	0	153	4 - 6 Volume	87	82	0	0	169
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:15	17:00			16:15
7 - 9 Pk Volume	31	60	0	0	91	4 - 6 Pk Volume	50	42	0	0	88
Pk Hr Factor	0.861	0.714	0.000	0.000	0.875	Pk Hr Factor	0.781	0.808	0.000	0.000	0.846

TRAFFIC SPEED SURVEYS

Spot Speed Study

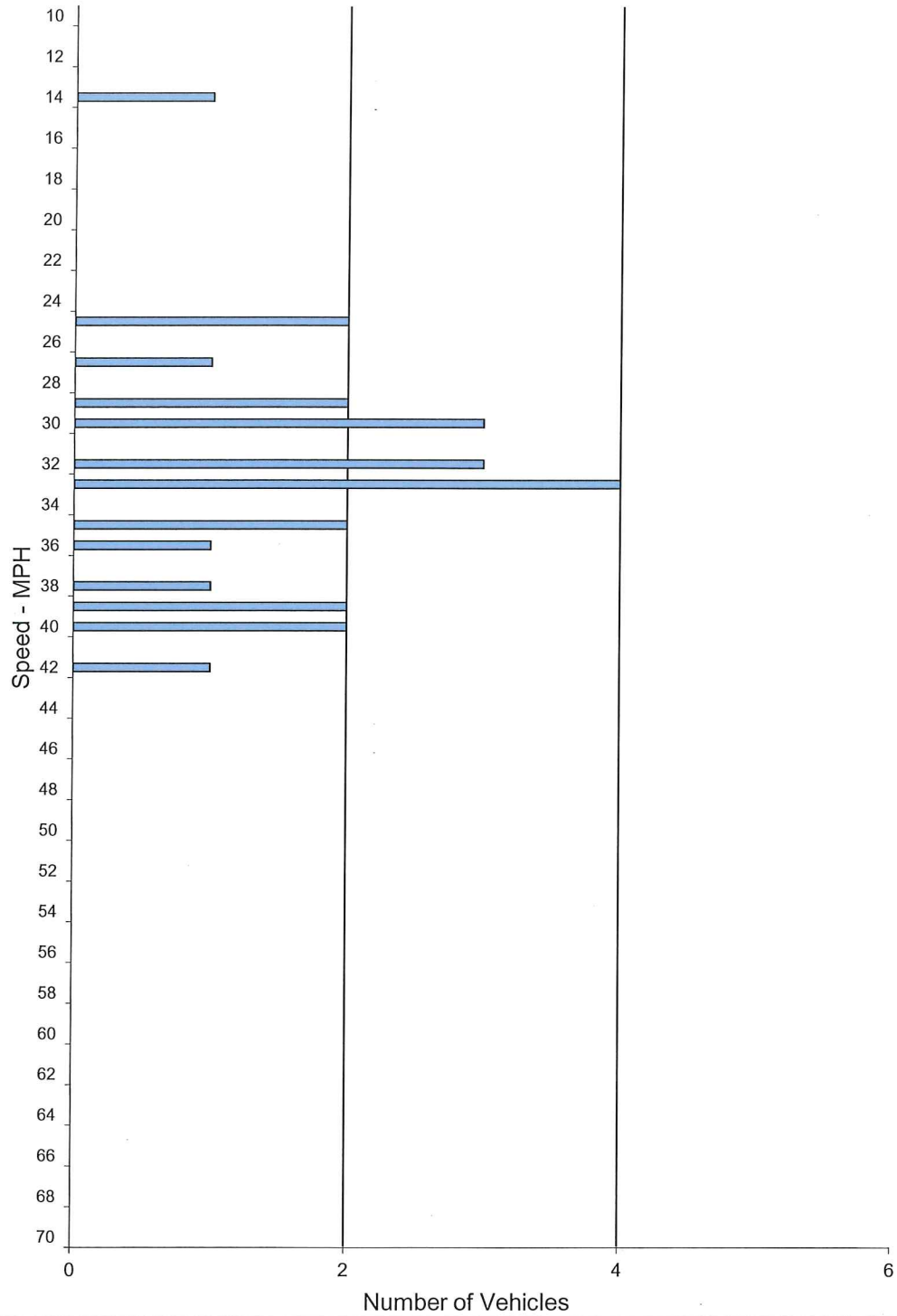
Prepared by: Associated Transportation Engineers

DATE: 4/6/2017 **Location:** Avenue of Flags NB between Damassa & 2nd Street

DAY: Thursday **Posted Speed:** 35 mph **Project #:** 17026

Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	1
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	2
26	
27	1
28	
29	2
30	3
31	
32	3
33	4
34	
35	2
36	1
37	
38	1
39	2
40	2
41	
42	1
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
>=70	



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	# / % Below Pace	# / % Above Pace
ALL	25	32.4	14 - 42	33 mph	39 mph	27 - 36	16	64%	12% / 3	24% / 6

Spot Speed Study

Prepared by: Associated Transportation Engineers

DATE: 4/6/2017 **Location:** Avenue of Flags SB approaching 1st Street

DAY: Thursday **Posted Speed:** 35 mph **Project #:** 17026

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	2
25	3
26	1
27	2
28	2
29	2
30	1
31	2
32	2
33	3
34	
35	1
36	1
37	1
38	
39	
40	1
41	
42	
43	
44	1
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
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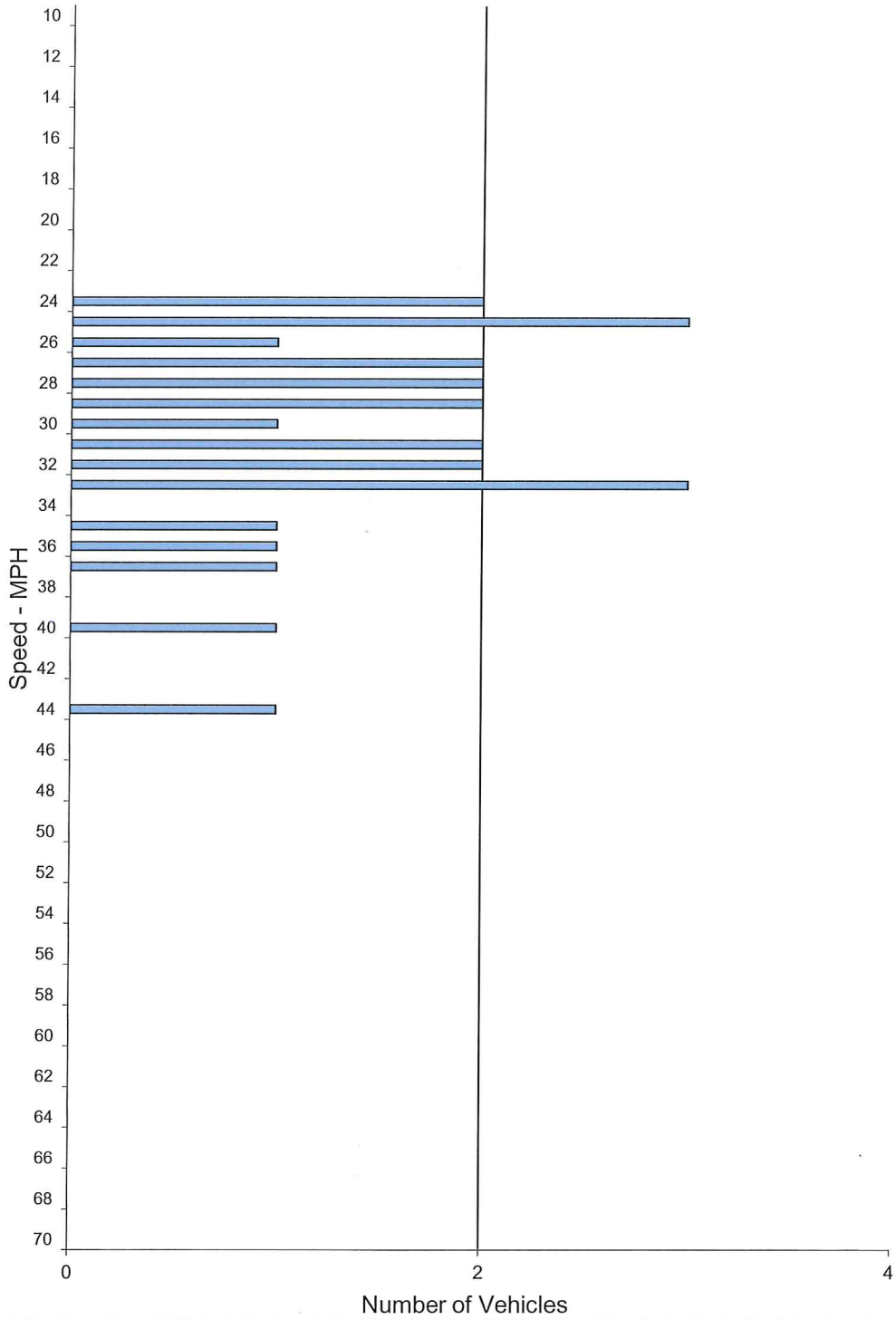
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
>=70	

Spot Speeds



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	# / % Below Pace	# / % Above Pace
ALL	25	30.6	24 - 44	30 mph	36 mph	24 - 33	20	80%	0% / 0	20% / 5

Spot Speed Study

Prepared by: Associated Transportation Engineers

DATE: 4/6/2017 **Location:** Avenue of Flags SB between Damassa & 2nd Street

DAY: Thursday **Posted Speed:** 35 mph **Project #:** 17026

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	1
23	
24	
25	1
26	2
27	3
28	3
29	2
30	4
31	3
32	4
33	
34	1
35	
36	
37	
38	
39	
40	1
41	
42	
43	
44	
45	
46	
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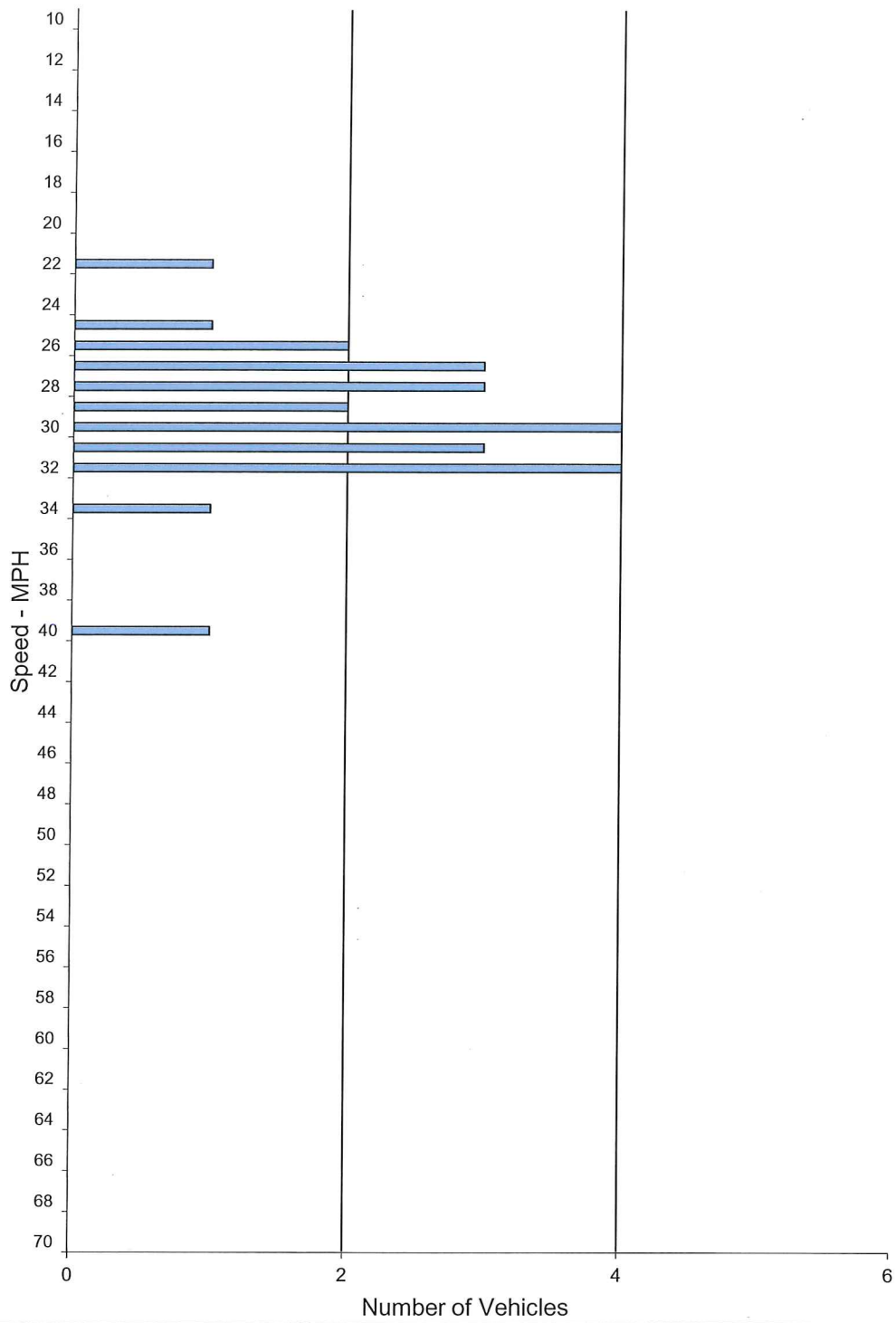
68	
69	
>=70	

Spot Speeds



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	# / % Below Pace	# / % Above Pace
ALL	25	29.5	22 - 40	30 mph	32 mph	25 - 34	23	92%	4% / 1	4% / 1

Spot Speed Study

Prepared by: Associated Transportation Engineers

DATE: 4/6/2017 **Location:** Avenue of Flags SB approaching Damassa

DAY: Thursday **Posted Speed:** 35 mph **Project #:** 17026

Spot Speeds

Speed mph	ALL Vehicles
<=10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	1
23	
24	
25	1
26	1
27	1
28	1
29	
30	1
31	1
32	5
33	3
34	5
35	1
36	1
37	1
38	1
39	
40	1
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
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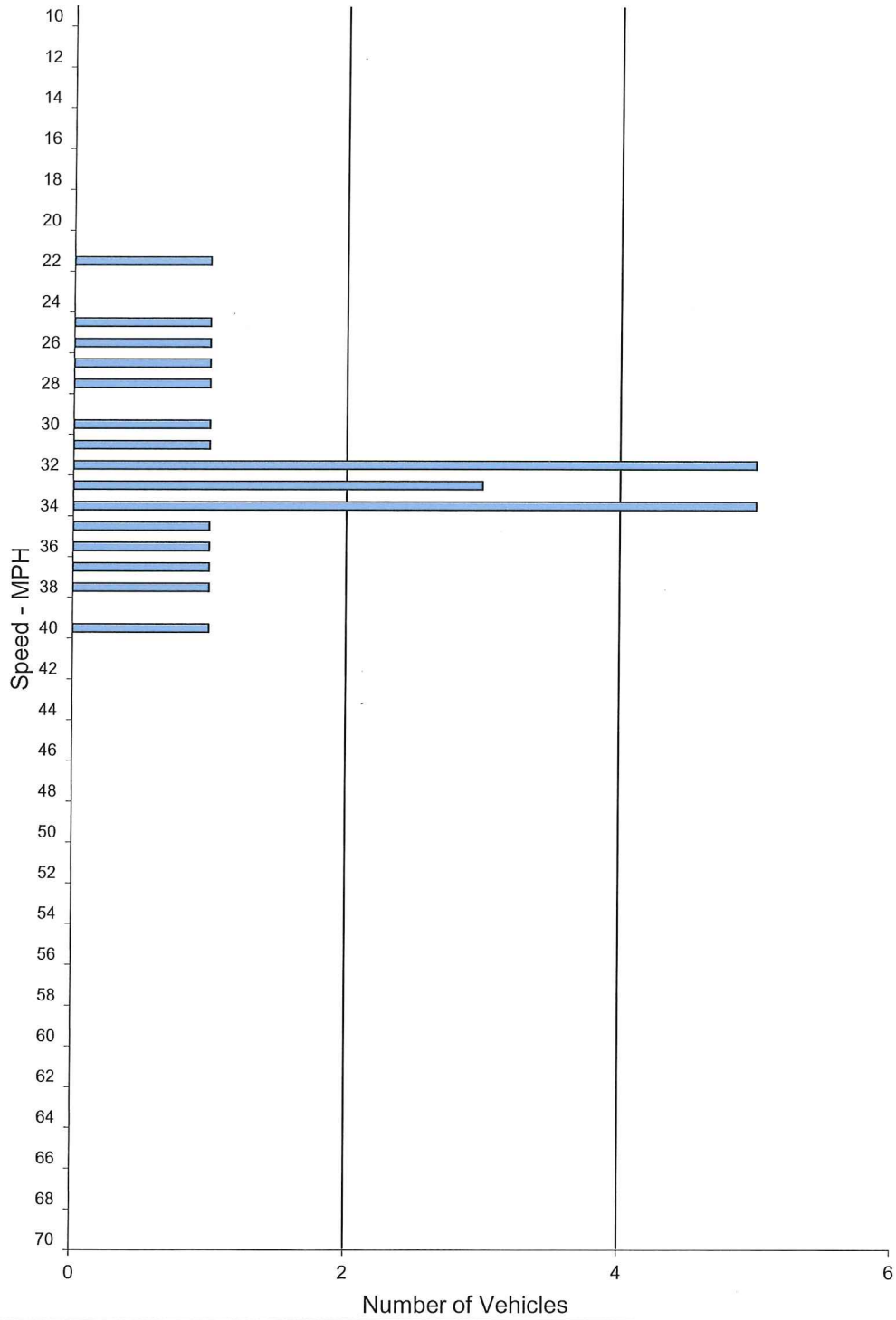
62	
63	
64	
65	
66	
67	
68	
69	
>=70	



SPEED PARAMETERS										
Class	Count	Average Speed	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	# / % Below Pace	# / % Above Pace
ALL	25	32.2	22 - 40	33 mph	36 mph	25 - 34	19	76%	4% / 1	20% / 5

PROJECT TRIP GENERATION CALCULATIONS

Associated Transportation Engineers
Trip Generation Worksheet

AVENUE OF FLAGS SPECIFIC PLAN - BUILDOUT DEVELOPMENT

Land Use	Use	Size	ADT		A.M. PEAK HOUR						P.M. PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
DISTRICTS 1-6	Commercial	74,792 SF	44.32	3,315	1.33	99	50%	50	50%	49	2.71	203	44%	89	56%	114
	Residential	163 DU	6.65	1,084	0.51	83	20%	17	80%	66	0.62	101	65%	66	35%	35
	Totals			**4,399**		**182**		**67**		**115**		**304**		**155**		**149**

Associated Transportation Engineers
Trip Generation Worksheet

AVENUE OF FLAGS SPECIFIC PLAN - 5-YEAR DEVELOPMENT

Land Use	Use	Size	ADT		A.M. PEAK HOUR						P.M. PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
DISTRICTS 1-5	Commercial	20,000 SF	44.32	886	1.33	27	50%	14	50%	13	2.71	54	44%	24	56%	30
	Residential	43 DU	6.65	286	0.51	22	20%	4	80%	18	0.62	27	65%	18	35%	9
	Totals			**1,172**		**49**		**18**		**31**		**81**		**42**		**39**
DISTRICT 6	Commercial	5,000 SF	44.32	222	1.33	7	50%	4	50%	3	2.71	14	44%	6	56%	8
	Residential	11 DU	6.65	73	0.51	6	20%	1	80%	5	0.62	7	65%	5	35%	2
	Totals			**295**		**13**		**5**		**8**		**21**		**11**		**10**

CUMULATIVE PROJECT LIST

APPROVED / PENDING DEVELOPMENT PROJECT SUMMARY

July 6, 2017

A. APPLICATIONS IN PROCESS	LAND USE	SIZE	NOTES
1. Buellton Hub	Light Industrial & Mftrg R&D Residential	46,676 sf 28,066 sf 54 units	- - 22x2-bdrm; 32x1-bdrm
2. The Network	Light Industrial	74,300 sf	
3. The Central Homes	Single Family Residential	8 units	8 single fam homes 3 bed/2.5 bath each
B. APPROVED – ON HOLD BY APPLICANT (no plans submitted)			
4. Chumash Mixed Use	Multi-Family Resid'l Commercial	7 units 7,911 sf	On hold
5. Village Senior Apartments	Multi-Family Resid'l	50 units	On hold
6. Terravant Annex	Light Industrial/ Warehouse	48,000 sf	On hold
7. Davidson Dev't (1 bldg remaining)	Light Industrial	6,000 sf	On hold
8. The Commons at Zaca Creek	Retail Commercial Restaurant Warehouse/Storage Residential (Mgr. Apt)	28,097 sf 13,423 sf 11,661 sf 1,105 (1 unit)	Awaiting building plan submittal
9. Live Oak Lanes	Bowling / Family Entertainment	45,633 sf	Awaiting building plan submittal
C. PLAN CHECK & UNDER CONSTRUCTION			
10. Fig Mtn Brewery Expansion Fig Mtn – Malt Silos	Light Industrial Foundation Only	1,606 sf n/a	
11. The Village Specific Plan	Commercial Residential Hotel Park	48,830 sf 155 units *225 units 1.8 acres	- - *no plans submitted
12. Flying Flags Expansion – Phase II (time extension only)	RV Park – accessory uses only pending	*sports field, pool/spa, *6 pool cabanas, RR bldg	*accessory uses
13. Flying Flags - Phase III	RV Park	29 new RV spaces, 7 new tent spaces *new pool/spa/pavilion *3 RR bldgs, *maintenance shop, *laundry building	- - *accessory uses

Associated Transportation Engineers
Trip Generation Worksheet

AVENUE OF FLAGS SPECIFIC PLAN - APPROVED/PENDING TRIP GENERATION

Name	Use	Size	ADT		A.M. PEAK HOUR						P.M. PEAK HOUR					
			Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
APPLICATIONS IN PROCESS																
Buellton Hub	Light Industrial	46,676 SF	6.97	325	0.92	43	88%	38	12%	5	0.97	45	12%	5	88%	40
	Business/Research	28,066 SF	8.11	228	1.22	34	83%	28	17%	6	1.07	30	15%	5	85%	25
	Residential	54 DU	6.65	359	0.51	28	20%	6	80%	22	0.62	33	65%	21	35%	12
The Network	Light Industrial	74,300 SF	6.97	518	0.92	68	88%	60	12%	8	0.97	72	12%	9	88%	63
The Central Townhomes	Residential	8 DU	6.65	53	0.51	4	20%	1	80%	3	0.62	5	65%	3	35%	2
APPROVED																
Chumash Mixed Use	Retail	7,911 SF	44.32	351	1.33	11	50%	6	50%	5	2.71	21	44%	9	56%	12
	Residential	7 DU	6.65	47	0.51	4	20%	1	80%	3	0.62	4	65%	3	35%	1
Village Senior Apts	Senior Apartments	50 DU	3.44	172	0.20	10	34%	3	66%	7	0.25	13	54%	7	46%	6
Terravant Annex	Light Industrial	48,000 SF	6.97	335	0.92	44	88%	39	12%	5	0.97	47	12%	6	88%	41
Davidson Development	Light Industrial	6,000 SF	6.97	42	0.92	6	88%	5	12%	1	0.97	6	12%	1	88%	5
Commons at Zaca Creek	Commercial	28,097 SF	44.32	1,245	1.33	37	50%	19	50%	18	2.71	76	44%	33	56%	43
	Restaurant	13,423 SF	127.15	1,707	10.81	145	55%	80	45%	65	9.85	132	60%	79	40%	53
	Warehouse	11,661 SF	3.56	42	0.30	3	79%	2	21%	1	0.32	4	25%	1	75%	3
	Apartment	1 DU	6.65	7	0.51	1	20%	0	80%	1	0.62	1	65%	1	35%	0
Live Oak Lanes	Bowling Alley	45,633 SF	33.33	1,521	0.00	0	55%	0	45%	0	1.71	78	61%	48	39%	30
PLAN CHECK & UNDER CONSTRUCTION																
Fig Mountain Expansion	Light Industrial	1,606 SF	6.97	11	0.92	1	88%	1	12%	0	0.97	2	12%	0	88%	2
The Village SP	Commercial	48,830 SF	42.70	2,085	0.96	47	62%	29	38%	18	3.71	181	48%	87	52%	94
	Townhomes	155 DU	5.81	901	0.44	68	17%	12	83%	56	0.52	81	67%	54	33%	27
	Hotel	225 Units	8.17	1,838	0.53	119	59%	70	41%	49	0.60	135	51%	69	49%	66
	Park	1.8 Acres	20.00	36	0.80	1	50%	1	50%	0	1.60	3	50%	2	50%	1
Flying Flags Phase II	Camping	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flying Flags Phase III	Camping	36 Sites	2.70	97	0.21	8	36%	3	64%	5	0.27	10	65%	7	35%	3

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1	US 101 SB/Jonata/AOF
Reference 2	Damassa/Southbound AOF
Reference 3	Damassa/Northbound AOF
Reference 4	Damassa/US 101 SB
Reference 5	Damassa/US 101 NB
Reference 6	Damassa/McMurray
Reference 7	Second/Central
Reference 8	Second/Southbound AOF
Reference 9	Second/Northbound AOF
Reference 10	SR 246/Central
Reference 11	SR 246/AOF
Reference 12	SR 246/US 101 SB
Reference 13	SR 246/US 101 NB
Reference 14	SR 246/McMurray

EXISTING AM PEAK HOUR
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	37	9	35	23	0	12	0	18	0	224	19
Future Volume (vph)	0	37	9	35	23	0	12	0	18	0	224	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	40	10	38	25	0	13	0	20	0	243	21

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	38	25	33	264
Volume Left (vph)	0	38	0	13	0
Volume Right (vph)	10	0	0	20	21
Hadj (s)	-0.09	0.53	0.03	-0.25	-0.01
Departure Headway (s)	4.7	5.8	5.3	4.2	4.2
Degree Utilization, x	0.06	0.06	0.04	0.04	0.31
Capacity (veh/h)	712	587	643	809	835
Control Delay (s)	8.0	7.9	7.3	7.4	9.1
Approach Delay (s)	8.0	7.7		7.4	9.1
Approach LOS	A	A		A	A

Intersection Summary			
Delay	8.6		
Level of Service	A		
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING AM PEAK HOUR
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	0	46	7	0	0	0	0	139	155	0
Future Volume (Veh/h)	0	4	0	46	7	0	0	0	0	139	155	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	0	50	8	0	0	0	0	151	168	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)								1150				
pX, platoon unblocked												
vC, conflicting volume	474	470	168	472	470	0	168			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	474	470	168	472	470	0	168			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	100	89	98	100	100			91		
cM capacity (veh/h)	459	446	876	463	446	1085	1410			1623		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	4	58	151	168
Volume Left	0	50	151	0
Volume Right	0	0	0	0
cSH	446	461	1623	1700
Volume to Capacity	0.01	0.13	0.09	0.10
Queue Length 95th (ft)	1	11	8	0
Control Delay (s)	13.1	13.9	7.4	0.0
Lane LOS	B	B	A	
Approach Delay (s)	13.1	13.9	3.5	
Approach LOS	B	B		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 13.8 SEC = LOS B

EXISTING AM PEAK HOUR
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	166	0	0	31	13	8	22	212	0	0	0
Future Volume (Veh/h)	1	166	0	0	31	13	8	22	212	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	180	0	0	34	14	9	24	230	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)								1156				
pX, platoon unblocked												
vC, conflicting volume	188	272	0	247	157	139	0			254		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	188	272	0	247	157	139	0			254		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	71	100	100	95	98	99			100		
cM capacity (veh/h)	730	631	1085	549	731	909	1623			1311		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	181	48	263
Volume Left	1	0	9
Volume Right	0	14	230
cSH	632	775	1623
Volume to Capacity	0.29	0.06	0.01
Queue Length 95th (ft)	30	5	0
Control Delay (s)	13.0	9.9	0.3
Lane LOS	B	A	A
Approach Delay (s)	13.0	9.9	0.3
Approach LOS	B	A	

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 12.4 sec = LOS B

EXISTING AM PEAK HOUR
4: US 101 SB On Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	317	58	18	64	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	317	58	18	64	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	345	63	20	70	0	0	0	0	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	70			408			486	486	376	486	518	70
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	70			408			486	486	376	486	518	70
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			100	100	100	100	100	100
cM capacity (veh/h)	1531			1151			485	473	670	485	454	993

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	408	90	0
Volume Left	0	20	0
Volume Right	63	0	0
cSH	1700	1151	1700
Volume to Capacity	0.24	0.02	0.00
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	1.9	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	1.9	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 1.9 SEC = LOS A

EXISTING AM PEAK HOUR
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	204	0	0	81	38	3	0	6	0	0	0
Future Volume (Veh/h)	116	204	0	0	81	38	3	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	126	222	0	0	88	41	3	0	7	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	129			222			582	603	222	590	582	108
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	129			222			582	603	222	590	582	108
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			100			99	100	99	100	100	100
cM capacity (veh/h)	1457			1347			396	377	818	388	388	945

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	348	129	10
Volume Left	126	0	3
Volume Right	0	41	7
cSH	1457	1700	620
Volume to Capacity	0.09	0.08	0.02
Queue Length 95th (ft)	7	0	1
Control Delay (s)	3.3	0.0	10.9
Lane LOS	A		B
Approach Delay (s)	3.3	0.0	10.9
Approach LOS			B

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	33.8%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 3.9 SEC = LOS A

EXISTING AM PEAK HOUR
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	114	16	107	17	18	5	51	56	10	3	26	31
Future Volume (vph)	114	16	107	17	18	5	51	56	10	3	26	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	124	17	116	18	20	5	55	61	11	3	28	34

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	257	43	127	65
Volume Left (vph)	124	18	55	3
Volume Right (vph)	116	5	11	34
Hadj (s)	-0.14	0.05	0.07	-0.27
Departure Headway (s)	4.3	4.7	4.7	4.5
Degree Utilization, x	0.31	0.06	0.17	0.08
Capacity (veh/h)	809	713	713	738
Control Delay (s)	9.2	8.0	8.7	7.9
Approach Delay (s)	9.2	8.0	8.7	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING AM PEAK HOUR
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	17	140	5	1	44	3	12	11	24	16	15	35
Future Volume (vph)	17	140	5	1	44	3	12	11	24	16	15	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	152	5	1	48	3	13	12	26	17	16	38

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	175	52	51	71
Volume Left (vph)	18	1	13	17
Volume Right (vph)	5	3	26	38
Hadj (s)	0.04	0.00	-0.22	-0.24
Departure Headway (s)	4.3	4.4	4.3	4.2
Degree Utilization, x	0.21	0.06	0.06	0.08
Capacity (veh/h)	819	782	790	794
Control Delay (s)	8.4	7.7	7.5	7.6
Approach Delay (s)	8.4	7.7	7.5	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING AM PEAK HOUR
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	92	85	13	18	0	0	0	0	4	156	25
Future Volume (Veh/h)	0	92	85	13	18	0	0	0	0	4	156	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	100	92	14	20	0	0	0	0	4	170	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)								540				
pX, platoon unblocked												
vC, conflicting volume	202	192	184	334	205	0	197			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	202	192	184	334	205	0	197			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	86	89	97	97	100	100			100		
cM capacity (veh/h)	739	702	859	492	690	1085	1376			1623		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	192	34	201
Volume Left	0	14	4
Volume Right	92	0	27
cSH	769	592	1623
Volume to Capacity	0.25	0.06	0.00
Queue Length 95th (ft)	25	5	0
Control Delay (s)	11.2	11.5	0.2
Lane LOS	B	B	A
Approach Delay (s)	11.2	11.5	0.2
Approach LOS	B	B	

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 11.2 sec = LOS B

EXISTING AM PEAK HOUR
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	10	0	0	11	2	20	153	13	0	0	0
Future Volume (Veh/h)	89	10	0	0	11	2	20	153	13	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	97	11	0	0	12	2	22	166	14	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)								546				
pX, platoon unblocked												
vC, conflicting volume	225	224	0	222	217	173	0			180		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	225	224	0	222	217	173	0			180		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	86	98	100	100	98	100	99			100		
cM capacity (veh/h)	711	666	1085	717	672	871	1623			1396		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	108	14	202
Volume Left	97	0	22
Volume Right	0	2	14
cSH	707	694	1623
Volume to Capacity	0.15	0.02	0.01
Queue Length 95th (ft)	13	2	1
Control Delay (s)	11.0	10.3	0.9
Lane LOS	B	B	A
Approach Delay (s)	11.0	10.3	0.9
Approach LOS	B	B	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	28.7%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 10.9 SCL = LOS B

EXISTING AM PEAK HOUR
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	927	7	7	548	18	5	0	7	5	1	29
Future Volume (Veh/h)	44	927	7	7	548	18	5	0	7	5	1	29
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	48	1008	8	8	596	20	5	0	8	5	1	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.90						0.90	0.90		0.90	0.90	0.90
vC, conflicting volume	616			1016			1454	1740	508	1230	1734	308
vC1, stage 1 conf vol							1108	1108		622	622	
vC2, stage 2 conf vol							346	632		608	1112	
vCu, unblocked vol	345			1016			1279	1597	508	1029	1590	2
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			99			98	100	98	99	100	97
cM capacity (veh/h)	1087			678			206	244	510	356	241	971

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	48	672	344	8	397	219	13	38
Volume Left	48	0	0	8	0	0	5	5
Volume Right	0	0	8	0	0	20	8	32
cSH	1087	1700	1700	678	1700	1700	326	743
Volume to Capacity	0.04	0.40	0.20	0.01	0.23	0.13	0.04	0.05
Queue Length 95th (ft)	3	0	0	1	0	0	3	4
Control Delay (s)	8.5	0.0	0.0	10.4	0.0	0.0	16.5	10.1
Lane LOS	A			B			C	B
Approach Delay (s)	0.4			0.1			16.5	10.1
Approach LOS							C	B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 10.2 SEC = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	747	92	63	426	50	59	17	62	125	30	91
Future Volume (veh/h)	109	747	92	63	426	50	59	17	62	125	30	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	118	812	100	68	463	54	64	18	67	136	33	99
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1083	133	89	979	114	87	507	431	173	567	507
Arrive On Green	0.09	0.34	0.34	0.05	0.31	0.31	0.05	0.27	0.27	0.10	0.32	0.32
Sat Flow, veh/h	1774	3173	391	1774	3196	371	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	118	453	459	68	255	262	64	18	67	136	33	99
Grp Sat Flow(s),veh/h/ln	1774	1770	1794	1774	1770	1797	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	4.9	17.1	17.1	2.9	8.8	8.9	2.7	0.5	2.4	5.6	1.0	3.4
Cycle Q Clear(g_c), s	4.9	17.1	17.1	2.9	8.8	8.9	2.7	0.5	2.4	5.6	1.0	3.4
Prop In Lane	1.00		0.22	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	604	612	89	542	551	87	507	431	173	567	507
V/C Ratio(X)	0.78	0.75	0.75	0.76	0.47	0.48	0.74	0.04	0.16	0.79	0.06	0.20
Avail Cap(c_a), veh/h	299	716	726	200	618	627	210	507	431	294	567	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	22.0	22.0	35.3	21.2	21.2	35.3	20.2	20.8	33.2	17.7	18.6
Incr Delay (d2), s/veh	8.3	3.7	3.6	12.4	0.6	0.6	11.4	0.1	0.8	7.8	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.9	9.0	1.7	4.4	4.5	1.6	0.3	1.1	3.1	0.5	1.6
LnGrp Delay(d),s/veh	42.1	25.6	25.6	47.7	21.8	21.9	46.8	20.3	21.6	41.0	17.9	19.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		1030			585			149			268	
Approach Delay, s/veh		27.5			24.8			32.3			30.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	25.0	8.3	30.2	8.2	28.6	10.9	27.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	20.5	8.5	30.5	8.9	24.1	12.7	26.3
Max Q Clear Time (g_c+I1), s	7.6	4.4	4.9	19.1	4.7	5.4	6.9	10.9
Green Ext Time (p_c), s	0.1	0.9	0.0	6.7	0.0	1.0	0.1	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	825	106	187	483	0	0	0	0	128	0	50
Future Volume (veh/h)	0	825	106	187	483	0	0	0	0	128	0	50
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	897	115	203	525	0				139	0	54
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1350	173	384	2458	0				365	0	325
Arrive On Green	0.00	0.43	0.43	0.22	0.69	0.00				0.21	0.00	0.21
Sat Flow, veh/h	0	3249	405	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	503	509	203	525	0				139	0	54
Grp Sat Flow(s),veh/h/ln	0	1770	1791	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	20.4	20.4	9.1	4.8	0.0				6.1	0.0	2.5
Cycle Q Clear(g_c), s	0.0	20.4	20.4	9.1	4.8	0.0				6.1	0.0	2.5
Prop In Lane	0.00		0.23	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	757	766	384	2458	0				365	0	325
V/C Ratio(X)	0.00	0.66	0.66	0.53	0.21	0.00				0.38	0.00	0.17
Avail Cap(c_a), veh/h	0	757	766	384	2458	0				365	0	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.64	0.64	0.91	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.6	20.6	31.2	4.9	0.0				30.8	0.0	29.4
Incr Delay (d2), s/veh	0.0	2.9	2.9	1.2	0.0	0.0				3.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.5	10.7	4.6	2.3	0.0				3.3	0.0	1.2
LnGrp Delay(d),s/veh	0.0	23.5	23.5	32.4	5.0	0.0				33.8	0.0	30.5
LnGrp LOS		C	C	C	A					C		C
Approach Vol, veh/h		1012			728						193	
Approach Delay, s/veh		23.5			12.6						32.9	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	43.0		23.0		67.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			19.5	38.5		18.5		62.5
Max Q Clear Time (g_c+I1), s			11.1	22.4		8.1		6.8
Green Ext Time (p_c), s			2.7	6.2		0.6		4.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.3
HCM 2010 LOS	C

EXISTING AM PEAK HOUR
13: U.S. Highway 101 NB Ramps & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	921	0	0	639	100	26	0	89	0	0	0
Future Volume (veh/h)	36	921	0	0	639	100	26	0	89	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	39	1001	0	0	695	109	28	0	97			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	548	2300	0	0	892	140	444	0	396			
Arrive On Green	0.62	1.00	0.00	0.00	0.29	0.29	0.25	0.00	0.25			
Sat Flow, veh/h	1774	3632	0	0	3160	481	1774	0	1583			
Grp Volume(v), veh/h	39	1001	0	0	401	403	28	0	97			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1778	1774	0	1583			
Q Serve(g_s), s	0.8	0.0	0.0	0.0	18.7	18.7	1.1	0.0	4.4			
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.0	18.7	18.7	1.1	0.0	4.4			
Prop In Lane	1.00		0.00	0.00		0.27	1.00		1.00			
Lane Grp Cap(c), veh/h	548	2300	0	0	515	517	444	0	396			
V/C Ratio(X)	0.07	0.44	0.00	0.00	0.78	0.78	0.06	0.00	0.25			
Avail Cap(c_a), veh/h	548	2300	0	0	875	879	444	0	396			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.68	0.68	0.00	0.00	0.61	0.61	1.00	0.00	1.00			
Uniform Delay (d), s/veh	12.0	0.0	0.0	0.0	29.3	29.3	25.7	0.0	27.0			
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.6	1.6	0.3	0.0	1.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.0	0.0	9.4	9.4	0.6	0.0	2.1			
LnGrp Delay(d),s/veh	12.1	0.4	0.0	0.0	30.9	30.9	26.0	0.0	28.4			
LnGrp LOS	B	A			C	C	C		C			
Approach Vol, veh/h		1040			804			125				
Approach Delay, s/veh		0.8			30.9			27.9				
Approach LOS		A			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.0		63.0			32.3	30.7
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		22.5		58.5			9.5	44.5
Max Q Clear Time (g_c+I1), s		6.4		2.0			2.8	20.7
Green Ext Time (p_c), s		0.3		9.7			3.7	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	924	30	6	626	83	61	8	8	86	5	51
Future Volume (veh/h)	41	924	30	6	626	83	61	8	8	86	5	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	45	1004	33	7	680	90	66	9	9	93	5	55
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	1193	39	101	944	125	357	172	172	357	27	296
Arrive On Green	0.20	0.68	0.68	0.06	0.30	0.30	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1774	3497	115	1774	3143	416	1774	856	856	1774	134	1470
Grp Volume(v), veh/h	45	508	529	7	383	387	66	0	18	93	0	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1789	1774	0	1712	1774	0	1603
Q Serve(g_s), s	1.9	19.3	19.3	0.3	17.4	17.4	2.8	0.0	0.8	4.0	0.0	2.8
Cycle Q Clear(g_c), s	1.9	19.3	19.3	0.3	17.4	17.4	2.8	0.0	0.8	4.0	0.0	2.8
Prop In Lane	1.00		0.06	1.00		0.23	1.00		0.50	1.00		0.92
Lane Grp Cap(c), veh/h	173	604	628	101	531	537	357	0	344	357	0	322
V/C Ratio(X)	0.26	0.84	0.84	0.07	0.72	0.72	0.18	0.00	0.05	0.26	0.00	0.19
Avail Cap(c_a), veh/h	173	604	628	101	562	569	357	0	344	357	0	322
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.5	12.5	12.5	40.2	28.1	28.1	29.8	0.0	29.0	30.3	0.0	29.8
Incr Delay (d2), s/veh	0.7	12.3	11.9	0.3	4.2	4.2	1.1	0.0	0.3	1.8	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.1	11.5	0.2	9.1	9.2	1.5	0.0	0.4	2.1	0.0	1.3
LnGrp Delay(d),s/veh	34.2	24.8	24.4	40.5	32.3	32.3	31.0	0.0	29.3	32.1	0.0	31.1
LnGrp LOS	C	C	C	D	C	C	C		C	C		C
Approach Vol, veh/h		1082			777			84			153	
Approach Delay, s/veh		25.0			32.4			30.6			31.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.6	9.6	35.2		22.6	13.3	31.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.1	5.1	30.7		18.1	7.2	28.6
Max Q Clear Time (g_c+I1), s		4.8	2.3	21.3		6.0	3.9	19.4
Green Ext Time (p_c), s		0.2	0.0	4.5		0.4	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C

EXISTING PM PEAK HOUR
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	36	10	39	43	0	4	0	18	0	204	22
Future Volume (vph)	0	36	10	39	43	0	4	0	18	0	204	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	39	11	42	47	0	4	0	20	0	222	24

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	42	47	24	246
Volume Left (vph)	0	42	0	4	0
Volume Right (vph)	11	0	0	20	24
Hadj (s)	-0.10	0.53	0.03	-0.43	-0.02
Departure Headway (s)	4.6	5.7	5.2	4.1	4.3
Degree Utilization, x	0.06	0.07	0.07	0.03	0.29
Capacity (veh/h)	720	596	654	830	814
Control Delay (s)	8.0	7.9	7.4	7.2	9.0
Approach Delay (s)	8.0	7.6		7.2	9.0
Approach LOS	A	A		A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3	1	155	2	0	0	0	0	83	180	3
Future Volume (Veh/h)	0	3	1	155	2	0	0	0	0	83	180	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	168	2	0	0	0	0	90	196	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1150				
pX, platoon unblocked												
vC, conflicting volume	378	378	198	378	379	0	199			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	378	378	198	378	379	0	199			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	100	70	100	100	100			94		
cM capacity (veh/h)	553	523	844	551	522	1085	1373			1623		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	4	170	90	199
Volume Left	0	168	90	0
Volume Right	1	0	0	3
cSH	578	551	1623	1700
Volume to Capacity	0.01	0.31	0.06	0.12
Queue Length 95th (ft)	1	33	4	0
Control Delay (s)	11.3	14.4	7.3	0.0
Lane LOS	B	B	A	
Approach Delay (s)	11.3	14.4	2.3	
Approach LOS	B	B		

Intersection Summary			
Average Delay	6.8		
Intersection Capacity Utilization	31.7%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 14.3 SEC = LOS B

EXISTING PM PEAK HOUR
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	81	0	0	144	55	15	17	144	0	0	0
Future Volume (Veh/h)	8	81	0	0	144	55	15	17	144	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	88	0	0	157	60	16	18	157	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)								1156				
pX, platoon unblocked												
vC, conflicting volume	267	207	0	172	128	96	0			175		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	267	207	0	172	128	96	0			175		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	87	100	100	79	94	99			100		
cM capacity (veh/h)	536	683	1085	707	755	960	1623			1401		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	97	217	191
Volume Left	9	0	16
Volume Right	0	60	157
cSH	666	802	1623
Volume to Capacity	0.15	0.27	0.01
Queue Length 95th (ft)	13	27	1
Control Delay (s)	11.3	11.1	0.7
Lane LOS	B	B	A
Approach Delay (s)	11.3	11.1	0.7
Approach LOS	B	B	

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 11.2 SEC = LOS B

EXISTING PM PEAK HOUR
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	233	20	16	206	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	233	20	16	206	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	253	22	17	224	0	0	0	0	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	224			275			522	522	264	522	533	224
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	224			275			522	522	264	522	533	224
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	100	100	100
cM capacity (veh/h)	1345			1288			461	453	775	461	447	815

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	275	241	0
Volume Left	0	17	0
Volume Right	22	0	0
cSH	1700	1288	1700
Volume to Capacity	0.16	0.01	0.00
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	0.7	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	0.7	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	27.4%	ICU Level of Service	A
Analysis Period (min)	15		

→ AVD = 0.7 SEC = LOS A

EXISTING PM PEAK HOUR
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	116	0	0	190	124	31	0	25	0	0	0
Future Volume (Veh/h)	117	116	0	0	190	124	31	0	25	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	127	126	0	0	207	135	34	0	27	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	342			126			654	722	126	682	654	274
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	342			126			654	722	126	682	654	274
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			100			90	100	97	100	100	100
cM capacity (veh/h)	1217			1460			349	316	924	325	346	764

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	253	342	61
Volume Left	127	0	34
Volume Right	0	135	27
cSH	1217	1700	482
Volume to Capacity	0.10	0.20	0.13
Queue Length 95th (ft)	9	0	11
Control Delay (s)	4.6	0.0	13.5
Lane LOS	A		B
Approach Delay (s)	4.6	0.0	13.5
Approach LOS			B

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 7.5 SEC = LOS A

EXISTING PM PEAK HOUR
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	58	14	68	13	12	4	135	41	14	4	63	162
Future Volume (vph)	58	14	68	13	12	4	135	41	14	4	63	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	63	15	74	14	13	4	147	45	15	4	68	176

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	152	31	207	248
Volume Left (vph)	63	14	147	4
Volume Right (vph)	74	4	15	176
Hadj (s)	-0.18	0.05	0.13	-0.39
Departure Headway (s)	4.8	5.2	4.8	4.2
Degree Utilization, x	0.20	0.04	0.27	0.29
Capacity (veh/h)	683	612	718	804
Control Delay (s)	9.0	8.5	9.6	9.0
Approach Delay (s)	9.0	8.5	9.6	9.0
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	12	82	6	6	85	7	22	33	13	10	16	20
Future Volume (vph)	12	82	6	6	85	7	22	33	13	10	16	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	89	7	7	92	8	24	36	14	11	17	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	109	107	74	50
Volume Left (vph)	13	7	24	11
Volume Right (vph)	7	8	14	22
Hadj (s)	0.02	0.00	-0.01	-0.19
Departure Headway (s)	4.3	4.3	4.4	4.3
Degree Utilization, x	0.13	0.13	0.09	0.06
Capacity (veh/h)	803	807	767	783
Control Delay (s)	8.0	7.9	7.9	7.6
Approach Delay (s)	8.0	7.9	7.9	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.9		
Level of Service	A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	49	60	24	34	0	0	0	0	13	251	61
Future Volume (Veh/h)	0	49	60	24	34	0	0	0	0	13	251	61
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	53	65	26	37	0	0	0	0	14	273	66
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								540				
pX, platoon unblocked												
vC, conflicting volume	352	334	306	426	367	0	339			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	352	334	306	426	367	0	339			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	91	91	94	93	100	100			99		
cM capacity (veh/h)	568	581	734	454	557	1085	1220			1623		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	118	63	353
Volume Left	0	26	14
Volume Right	65	0	66
cSH	656	509	1623
Volume to Capacity	0.18	0.12	0.01
Queue Length 95th (ft)	16	11	1
Control Delay (s)	11.7	13.1	0.4
Lane LOS	B	B	A
Approach Delay (s)	11.7	13.1	0.4
Approach LOS	B	B	

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 12.2 SEC = LOS B

EXISTING PM PEAK HOUR
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	42	10	0	20	10	51	134	9	0	0	0
Future Volume (Veh/h)	0	42	10	0	20	10	51	134	9	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	46	11	0	22	11	55	146	10	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)								546				
pX, platoon unblocked												
vC, conflicting volume	283	266	0	295	261	151	0			156		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	283	266	0	295	261	151	0			156		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	93	99	100	96	99	97			100		
cM capacity (veh/h)	627	618	1085	598	622	895	1623			1424		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	57	33	211
Volume Left	0	0	55
Volume Right	11	11	10
cSH	674	692	1623
Volume to Capacity	0.08	0.05	0.03
Queue Length 95th (ft)	7	4	3
Control Delay (s)	10.8	10.5	2.1
Lane LOS	B	B	A
Approach Delay (s)	10.8	10.5	2.1
Approach LOS	B	B	

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 10.7 SEC = LOS B

EXISTING PM PEAK HOUR
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	641	7	25	1068	49	14	3	9	9	0	16
Future Volume (Veh/h)	40	641	7	25	1068	49	14	3	9	9	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	697	8	27	1161	53	15	3	10	10	0	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.74						0.74	0.74		0.74	0.74	0.74
vC, conflicting volume	1214			705			1438	2055	352	1688	2032	607
vC1, stage 1 conf vol							787	787		1242	1242	
vC2, stage 2 conf vol							652	1268		446	791	
vCu, unblocked vol	581			705			885	1720	352	1222	1690	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			97			95	99	98	96	100	98
cM capacity (veh/h)	730			889			310	229	644	272	245	801

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	43	465	240	27	774	440	28	27
Volume Left	43	0	0	27	0	0	15	10
Volume Right	0	0	8	0	0	53	10	17
cSH	730	1700	1700	889	1700	1700	364	465
Volume to Capacity	0.06	0.27	0.14	0.03	0.46	0.26	0.08	0.06
Queue Length 95th (ft)	5	0	0	2	0	0	6	5
Control Delay (s)	10.2	0.0	0.0	9.2	0.0	0.0	15.7	13.2
Lane LOS	B			A			C	B
Approach Delay (s)	0.6			0.2			15.7	13.2
Approach LOS							C	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 11.9 SEC = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	544	45	88	845	82	114	40	90	135	36	188
Future Volume (veh/h)	70	544	45	88	845	82	114	40	90	135	36	188
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	76	591	49	96	918	89	124	43	98	147	39	204
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1066	88	124	1099	107	157	484	411	184	486	435
Arrive On Green	0.05	0.32	0.32	0.07	0.34	0.34	0.09	0.26	0.26	0.10	0.27	0.27
Sat Flow, veh/h	1774	3310	274	1774	3260	316	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	76	316	324	96	498	509	124	43	98	147	39	204
Grp Sat Flow(s),veh/h/ln	1774	1770	1814	1774	1770	1807	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	3.1	10.8	10.9	3.9	19.1	19.1	5.0	1.3	3.6	6.0	1.2	7.9
Cycle Q Clear(g_c), s	3.1	10.8	10.9	3.9	19.1	19.1	5.0	1.3	3.6	6.0	1.2	7.9
Prop In Lane	1.00		0.15	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	98	570	585	124	596	609	157	484	411	184	486	435
V/C Ratio(X)	0.78	0.55	0.56	0.77	0.84	0.84	0.79	0.09	0.24	0.80	0.08	0.47
Avail Cap(c_a), veh/h	157	570	585	239	637	651	215	484	411	239	486	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	20.6	20.6	33.6	22.5	22.5	32.8	20.6	21.5	32.2	19.8	22.2
Incr Delay (d2), s/veh	12.5	1.2	1.2	9.8	9.0	8.8	12.7	0.4	1.4	13.5	0.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.4	5.6	2.3	10.8	11.0	3.0	0.7	1.7	3.6	0.6	3.9
LnGrp Delay(d),s/veh	46.8	21.7	21.7	43.5	31.5	31.3	45.5	21.0	22.9	45.7	20.1	25.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		716			1103			265			390	
Approach Delay, s/veh		24.4			32.4			33.2			32.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	23.6	9.6	28.2	11.0	24.7	8.5	29.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.9	19.1	9.9	23.1	8.9	20.1	6.5	26.5
Max Q Clear Time (g_c+I1), s	8.0	5.6	5.9	12.9	7.0	9.9	5.1	21.1
Green Ext Time (p_c), s	0.1	1.7	0.1	6.9	0.0	1.5	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

EXISTING PM PEAK HOUR
12: State Route 246 & U.S. Highway 101 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	719	68	101	976	0	0	0	0	120	0	38
Future Volume (veh/h)	0	719	68	101	976	0	0	0	0	120	0	38
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	782	74	110	1061	0				130	0	41
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1435	136	306	2340	0				424	0	378
Arrive On Green	0.00	0.44	0.44	0.17	0.66	0.00				0.24	0.00	0.24
Sat Flow, veh/h	0	3362	309	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	423	433	110	1061	0				130	0	41
Grp Sat Flow(s),veh/h/ln	0	1770	1808	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	15.9	15.9	4.9	13.1	0.0				5.4	0.0	1.8
Cycle Q Clear(g_c), s	0.0	15.9	15.9	4.9	13.1	0.0				5.4	0.0	1.8
Prop In Lane	0.00		0.17	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	777	794	306	2340	0				424	0	378
V/C Ratio(X)	0.00	0.55	0.55	0.36	0.45	0.00				0.31	0.00	0.11
Avail Cap(c_a), veh/h	0	777	794	306	2340	0				424	0	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.80	0.80	0.65	0.65	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.6	18.6	32.9	7.4	0.0				28.1	0.0	26.8
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.5	0.1	0.0				1.9	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.2	8.4	2.5	6.4	0.0				2.9	0.0	0.9
LnGrp Delay(d),s/veh	0.0	20.8	20.8	33.3	7.5	0.0				30.0	0.0	27.3
LnGrp LOS		C	C	C	A					C		C
Approach Vol, veh/h		856			1171						171	
Approach Delay, s/veh		20.8			9.9						29.4	
Approach LOS		C			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			20.0	44.0		26.0		64.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			15.5	39.5		21.5		59.5
Max Q Clear Time (g_c+I1), s			6.9	17.9		7.4		15.1
Green Ext Time (p_c), s			4.8	5.7		0.6		10.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	774	0	0	1008	180	82	0	244	0	0	0
Future Volume (veh/h)	59	774	0	0	1008	180	82	0	244	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	64	841	0	0	1096	196	89	0	265			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	328	2379	0	0	1313	234	404	0	361			
Arrive On Green	0.37	1.00	0.00	0.00	0.44	0.44	0.23	0.00	0.23			
Sat Flow, veh/h	1774	3632	0	0	3096	535	1774	0	1583			
Grp Volume(v), veh/h	64	841	0	0	644	648	89	0	265			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1768	1774	0	1583			
Q Serve(g_s), s	2.2	0.0	0.0	0.0	29.0	29.3	3.7	0.0	14.0			
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.0	29.0	29.3	3.7	0.0	14.0			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		1.00			
Lane Grp Cap(c), veh/h	328	2379	0	0	774	773	404	0	361			
V/C Ratio(X)	0.19	0.35	0.00	0.00	0.83	0.84	0.22	0.00	0.73			
Avail Cap(c_a), veh/h	328	2379	0	0	922	921	404	0	361			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.81	0.81	0.00	0.00	0.34	0.34	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.8	0.0	0.0	0.0	22.4	22.5	28.3	0.0	32.2			
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	2.0	2.1	1.3	0.0	12.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.0	0.0	14.6	14.7	1.9	0.0	7.4			
LnGrp Delay(d),s/veh	24.0	0.3	0.0	0.0	24.4	24.6	29.5	0.0	44.7			
LnGrp LOS	C	A			C	C	C		D			
Approach Vol, veh/h		905			1292			354				
Approach Delay, s/veh		2.0			24.5			40.9				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		65.0			21.2	43.8
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		20.5		60.5			9.1	46.9
Max Q Clear Time (g_c+I1), s		16.0		2.0			4.2	31.3
Green Ext Time (p_c), s		0.6		7.6			2.5	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

EXISTING PM PEAK HOUR
14: McMurray Road & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	878	69	16	908	93	192	44	21	108	18	79
Future Volume (veh/h)	58	878	69	16	908	93	192	44	21	108	18	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	63	954	75	17	987	101	209	48	23	117	20	86
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	1134	89	101	1143	117	357	240	115	357	62	266
Arrive On Green	0.09	0.68	0.68	0.06	0.35	0.35	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1774	3325	261	1774	3242	332	1774	1191	571	1774	307	1322
Grp Volume(v), veh/h	63	508	521	17	539	549	209	0	71	117	0	106
Grp Sat Flow(s),veh/h/ln	1774	1770	1817	1774	1770	1804	1774	0	1762	1774	0	1629
Q Serve(g_s), s	3.1	19.3	19.3	0.8	25.5	25.5	9.6	0.0	3.0	5.1	0.0	5.0
Cycle Q Clear(g_c), s	3.1	19.3	19.3	0.8	25.5	25.5	9.6	0.0	3.0	5.1	0.0	5.0
Prop In Lane	1.00		0.14	1.00		0.18	1.00		0.32	1.00		0.81
Lane Grp Cap(c), veh/h	80	604	620	101	624	636	357	0	354	357	0	328
V/C Ratio(X)	0.78	0.84	0.84	0.17	0.86	0.86	0.59	0.00	0.20	0.33	0.00	0.32
Avail Cap(c_a), veh/h	124	604	620	101	624	636	357	0	354	357	0	328
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.5	12.5	12.5	40.4	27.1	27.1	32.6	0.0	29.9	30.7	0.0	30.7
Incr Delay (d2), s/veh	14.8	12.5	12.2	0.8	12.0	11.8	6.9	0.0	1.3	2.4	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.1	11.4	0.4	14.5	14.8	5.4	0.0	1.6	2.7	0.0	2.5
LnGrp Delay(d),s/veh	55.3	24.9	24.7	41.2	39.1	39.0	39.4	0.0	31.2	33.2	0.0	33.3
LnGrp LOS	E	C	C	D	D	D	D		C	C		C
Approach Vol, veh/h		1092			1105			280			223	
Approach Delay, s/veh		26.6			39.1			37.3			33.3	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.6	9.6	35.2		22.6	8.6	36.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.1	5.1	30.7		18.1	6.3	29.5
Max Q Clear Time (g_c+I1), s		11.6	2.8	21.3		7.1	5.1	27.5
Green Ext Time (p_c), s		0.5	0.0	4.5		0.7	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.4
HCM 2010 LOS	C

EXISTING PM PEAK HOUR WITH DIVERSION
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	36	10	39	43	0	4	0	18	0	164	32
Future Volume (vph)	0	36	10	39	43	0	4	0	18	0	164	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	39	11	42	47	0	4	0	20	0	178	35

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	42	47	24	213
Volume Left (vph)	0	42	0	4	0
Volume Right (vph)	11	0	0	20	35
Hadj (s)	-0.10	0.53	0.03	-0.43	-0.06
Departure Headway (s)	4.6	5.6	5.1	4.0	4.2
Degree Utilization, x	0.06	0.07	0.07	0.03	0.25
Capacity (veh/h)	736	607	667	840	821
Control Delay (s)	7.9	7.8	7.3	7.2	8.6
Approach Delay (s)	7.9	7.5		7.2	8.6
Approach LOS	A	A		A	A

Intersection Summary			
Delay	8.2		
Level of Service	A		
Intersection Capacity Utilization	26.1%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	3	1	125	2	0	0	0	0	83	140	3
Future Volume (vph)	0	3	1	125	2	0	0	0	0	83	140	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	136	2	0	0	0	0	90	152	3

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total (vph)	4	138	90	155
Volume Left (vph)	0	136	90	0
Volume Right (vph)	1	0	0	3
Hadj (s)	-0.12	0.23	0.53	0.02
Departure Headway (s)	4.6	4.7	5.4	4.9
Degree Utilization, x	0.01	0.18	0.13	0.21
Capacity (veh/h)	745	722	649	716
Control Delay (s)	7.6	8.8	8.0	8.0
Approach Delay (s)	7.6	8.8	8.0	
Approach LOS	A	A	A	

Intersection Summary			
Delay	8.3		
Level of Service	A		
Intersection Capacity Utilization	27.9%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	81	0	0	114	55	15	17	129	0	0	0
Future Volume (vph)	3	81	0	0	114	55	15	17	129	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	88	0	0	124	60	16	18	140	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	91	184	174
Volume Left (vph)	3	0	16
Volume Right (vph)	0	60	140
Hadj (s)	0.04	-0.16	-0.43
Departure Headway (s)	4.5	4.2	4.1
Degree Utilization, x	0.11	0.22	0.20
Capacity (veh/h)	758	810	829
Control Delay (s)	8.1	8.4	8.1
Approach Delay (s)	8.1	8.4	8.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.2		
Level of Service	A		
Intersection Capacity Utilization	25.7%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	218	20	16	176	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	218	20	16	176	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	237	22	17	191	0	0	0	0	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	191			259			473	473	248	473	484	191
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	191			259			473	473	248	473	484	191
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	100	100	100	100
cM capacity (veh/h)	1383			1306			496	483	791	496	476	851

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	259	208	0
Volume Left	0	17	0
Volume Right	22	0	0
cSH	1700	1306	1700
Volume to Capacity	0.15	0.01	0.00
Queue Length 95th (ft)	0	1	0
Control Delay (s)	0.0	0.7	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	0.7	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	25.9%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 0.7 SEC = LOS A

EXISTING PM PEAK HOUR WITH DIVERSION
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	106	0	0	160	124	31	0	25	0	0	0
Future Volume (Veh/h)	112	106	0	0	160	124	31	0	25	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	122	115	0	0	174	135	34	0	27	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	309			115			600	668	115	628	600	242
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	309			115			600	668	115	628	600	242
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			100			91	100	97	100	100	100
cM capacity (veh/h)	1252			1474			382	342	937	356	374	797

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	237	309	61
Volume Left	122	0	34
Volume Right	0	135	27
cSH	1252	1700	518
Volume to Capacity	0.10	0.18	0.12
Queue Length 95th (ft)	8	0	10
Control Delay (s)	4.6	0.0	12.9
Lane LOS	A		B
Approach Delay (s)	4.6	0.0	12.9
Approach LOS			B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 7.4 sec = LOS A

EXISTING PM PEAK HOUR WITH DIVERSION
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	48	14	68	13	12	4	125	51	14	4	83	142
Future Volume (vph)	48	14	68	13	12	4	125	51	14	4	83	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	15	74	14	13	4	136	55	15	4	90	154

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	141	31	206	248
Volume Left (vph)	52	14	136	4
Volume Right (vph)	74	4	15	154
Hadj (s)	-0.21	0.05	0.12	-0.34
Departure Headway (s)	4.8	5.2	4.7	4.3
Degree Utilization, x	0.19	0.04	0.27	0.29
Capacity (veh/h)	687	615	726	803
Control Delay (s)	8.9	8.4	9.5	9.0
Approach Delay (s)	8.9	8.4	9.5	9.0
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	12	82	6	6	70	7	22	33	13	10	21	25
Future Volume (vph)	12	82	6	6	70	7	22	33	13	10	21	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	89	7	7	76	8	24	36	14	11	23	27

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	109	91	74	61
Volume Left (vph)	13	7	24	11
Volume Right (vph)	7	8	14	27
Hadj (s)	0.02	0.00	-0.01	-0.20
Departure Headway (s)	4.3	4.3	4.4	4.2
Degree Utilization, x	0.13	0.11	0.09	0.07
Capacity (veh/h)	801	791	773	794
Control Delay (s)	8.0	7.9	7.8	7.6
Approach Delay (s)	8.0	7.9	7.8	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	49	60	24	34	0	0	0	0	13	196	46
Future Volume (vph)	0	49	60	24	34	0	0	0	0	13	196	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	53	65	26	37	0	0	0	0	14	213	50

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	118	63	277
Volume Left (vph)	0	26	14
Volume Right (vph)	65	0	50
Hadj (s)	-0.30	0.12	-0.06
Departure Headway (s)	4.3	4.8	4.3
Degree Utilization, x	0.14	0.08	0.33
Capacity (veh/h)	774	697	815
Control Delay (s)	8.0	8.2	9.3
Approach Delay (s)	8.0	8.2	9.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	42	10	0	0	20	10	51	119	9	0	0	0
Future Volume (vph)	42	10	0	0	20	10	51	119	9	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	11	0	0	22	11	55	129	10	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	57	33	194
Volume Left (vph)	46	0	55
Volume Right (vph)	0	11	10
Hadj (s)	0.20	-0.17	0.06
Departure Headway (s)	4.6	4.2	4.2
Degree Utilization, x	0.07	0.04	0.22
Capacity (veh/h)	752	806	840
Control Delay (s)	7.9	7.4	8.4
Approach Delay (s)	7.9	7.4	8.4
Approach LOS	A	A	A

Intersection Summary			
Delay	8.2		
Level of Service	A		
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		

EXISTING PM PEAK HOUR WITH DIVERSION
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	641	7	25	1068	49	14	3	9	9	0	16
Future Volume (Veh/h)	40	641	7	25	1068	49	14	3	9	9	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	697	8	27	1161	53	15	3	10	10	0	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.72						0.72	0.72		0.72	0.72	0.72
vC, conflicting volume	1214			705			1438	2055	352	1688	2032	607
vC1, stage 1 conf vol							787	787		1242	1242	
vC2, stage 2 conf vol							652	1268		446	791	
vCu, unblocked vol	530			705			841	1693	352	1185	1662	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			97			95	99	98	96	100	98
cM capacity (veh/h)	747			889			311	235	644	282	249	784

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	43	465	240	27	774	440	28	27
Volume Left	43	0	0	27	0	0	15	10
Volume Right	0	0	8	0	0	53	10	17
cSH	747	1700	1700	889	1700	1700	366	473
Volume to Capacity	0.06	0.27	0.14	0.03	0.46	0.26	0.08	0.06
Queue Length 95th (ft)	5	0	0	2	0	0	6	5
Control Delay (s)	10.1	0.0	0.0	9.2	0.0	0.0	15.7	13.1
Lane LOS	B			A			C	B
Approach Delay (s)	0.6			0.2			15.7	13.1
Approach LOS							C	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

→ AWD = 11.8 SEC = LOS B

EXISTING PM PEAK HOUR WITH DIVERSION
11: AOF & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	554	45	98	895	82	114	35	95	135	26	143
Future Volume (veh/h)	60	554	45	98	895	82	114	35	95	135	26	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	602	49	107	973	89	124	38	103	147	28	155
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1063	86	138	1143	104	157	477	405	184	479	429
Arrive On Green	0.05	0.32	0.32	0.08	0.35	0.35	0.09	0.26	0.26	0.10	0.27	0.27
Sat Flow, veh/h	1774	3315	269	1774	3279	300	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	65	321	330	107	525	537	124	38	103	147	28	155
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	1770	1810	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	2.7	11.2	11.2	4.4	20.4	20.4	5.1	1.2	3.8	6.0	0.9	5.9
Cycle Q Clear(g_c), s	2.7	11.2	11.2	4.4	20.4	20.4	5.1	1.2	3.8	6.0	0.9	5.9
Prop In Lane	1.00		0.15	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	567	582	138	617	631	157	477	405	184	479	429
V/C Ratio(X)	0.74	0.57	0.57	0.78	0.85	0.85	0.79	0.08	0.25	0.80	0.06	0.36
Avail Cap(c_a), veh/h	127	567	582	251	663	678	213	477	405	237	479	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	20.9	21.0	33.6	22.4	22.4	33.2	21.0	22.0	32.5	20.1	21.9
Incr Delay (d2), s/veh	12.3	1.3	1.3	9.0	9.8	9.7	13.0	0.3	1.5	13.8	0.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.6	5.8	2.5	11.6	11.8	3.0	0.6	1.8	3.6	0.5	2.8
LnGrp Delay(d),s/veh	47.1	22.2	22.2	42.6	32.3	32.1	46.2	21.3	23.5	46.4	20.3	24.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		716			1169			265			330	
Approach Delay, s/veh		24.5			33.1			33.8			33.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	23.5	10.3	28.3	11.1	24.6	8.2	30.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.9	19.0	10.5	22.6	8.9	20.0	5.3	27.8
Max Q Clear Time (g_c+I1), s	8.0	5.8	6.4	13.2	7.1	7.9	4.7	22.4
Green Ext Time (p_c), s	0.1	1.3	0.1	6.6	0.0	1.3	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C

EXISTING PM PEAK HOUR WITH DIVERSION
12: State Route 246 & U.S. Highway 101 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	734	68	101	1006	0	0	0	0	120	0	68
Future Volume (veh/h)	0	734	68	101	1006	0	0	0	0	120	0	68
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	798	74	110	1093	0				130	0	74
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1437	133	306	2340	0				424	0	378
Arrive On Green	0.00	0.44	0.44	0.17	0.66	0.00				0.24	0.00	0.24
Sat Flow, veh/h	0	3368	304	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	431	441	110	1093	0				130	0	74
Grp Sat Flow(s),veh/h/ln	0	1770	1809	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	16.3	16.3	4.9	13.6	0.0				5.4	0.0	3.4
Cycle Q Clear(g_c), s	0.0	16.3	16.3	4.9	13.6	0.0				5.4	0.0	3.4
Prop In Lane	0.00		0.17	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	777	794	306	2340	0				424	0	378
V/C Ratio(X)	0.00	0.56	0.56	0.36	0.47	0.00				0.31	0.00	0.20
Avail Cap(c_a), veh/h	0	777	794	306	2340	0				424	0	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.79	0.79	0.64	0.64	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.7	18.7	32.9	7.5	0.0				28.1	0.0	27.3
Incr Delay (d2), s/veh	0.0	2.3	2.2	0.5	0.1	0.0				1.9	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.6	2.5	6.6	0.0				2.9	0.0	1.6
LnGrp Delay(d),s/veh	0.0	21.0	21.0	33.3	7.6	0.0				30.0	0.0	28.5
LnGrp LOS		C	C	C	A					C		C
Approach Vol, veh/h		872			1203						204	
Approach Delay, s/veh		21.0			9.9						29.5	
Approach LOS		C			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			20.0	44.0		26.0		64.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			15.5	39.5		21.5		59.5
Max Q Clear Time (g_c+I1), s			6.9	18.3		7.4		15.6
Green Ext Time (p_c), s			4.9	5.8		0.8		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B

EXISTING PM PEAK HOUR WITH DIVERSION
13: U.S. Highway 101 NB Ramps & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	784	0	0	1038	180	82	0	244	0	0	0
Future Volume (veh/h)	64	784	0	0	1038	180	82	0	244	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	70	852	0	0	1128	196	89	0	265			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	324	2399	0	0	1344	233	394	0	352			
Arrive On Green	0.36	1.00	0.00	0.00	0.45	0.45	0.22	0.00	0.22			
Sat Flow, veh/h	1774	3632	0	0	3111	522	1774	0	1583			
Grp Volume(v), veh/h	70	852	0	0	660	664	89	0	265			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1771	1774	0	1583			
Q Serve(g_s), s	2.4	0.0	0.0	0.0	29.7	30.0	3.7	0.0	14.1			
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.0	29.7	30.0	3.7	0.0	14.1			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		1.00			
Lane Grp Cap(c), veh/h	324	2399	0	0	788	788	394	0	352			
V/C Ratio(X)	0.22	0.36	0.00	0.00	0.84	0.84	0.23	0.00	0.75			
Avail Cap(c_a), veh/h	324	2399	0	0	924	925	394	0	352			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	0.30	0.30	1.00	0.00	1.00			
Uniform Delay (d), s/veh	24.1	0.0	0.0	0.0	22.1	22.2	28.7	0.0	32.7			
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.0	1.9	2.0	1.3	0.0	13.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.0	0.0	14.9	15.0	1.9	0.0	7.5			
LnGrp Delay(d),s/veh	24.4	0.3	0.0	0.0	23.9	24.1	30.0	0.0	46.6			
LnGrp LOS	C	A			C	C	C		D			
Approach Vol, veh/h		922			1324			354				
Approach Delay, s/veh		2.2			24.0			42.4				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		24.5		65.5			20.9	44.6
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		20.0		61.0			9.5	47.0
Max Q Clear Time (g_c+I1), s		16.1		2.0			4.4	32.0
Green Ext Time (p_c), s		0.5		7.8			2.6	8.1

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

EXISTING PM PEAK HOUR WITH DIVERSION
14: McMurray Road & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	878	69	16	908	93	192	44	21	108	18	109
Future Volume (veh/h)	68	878	69	16	908	93	192	44	21	108	18	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	954	75	17	987	101	209	48	23	117	20	118
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	1138	89	99	1117	114	357	240	115	357	47	278
Arrive On Green	0.11	0.68	0.68	0.06	0.34	0.34	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1774	3325	261	1774	3242	332	1774	1191	571	1774	235	1384
Grp Volume(v), veh/h	74	508	521	17	539	549	209	0	71	117	0	138
Grp Sat Flow(s),veh/h/ln	1774	1770	1817	1774	1770	1804	1774	0	1762	1774	0	1619
Q Serve(g_s), s	3.7	19.1	19.1	0.8	25.8	25.8	9.6	0.0	3.0	5.1	0.0	6.7
Cycle Q Clear(g_c), s	3.7	19.1	19.1	0.8	25.8	25.8	9.6	0.0	3.0	5.1	0.0	6.7
Prop In Lane	1.00		0.14	1.00		0.18	1.00		0.32	1.00		0.86
Lane Grp Cap(c), veh/h	94	606	622	99	610	622	357	0	354	357	0	326
V/C Ratio(X)	0.78	0.84	0.84	0.17	0.88	0.88	0.59	0.00	0.20	0.33	0.00	0.42
Avail Cap(c_a), veh/h	140	606	622	99	610	622	357	0	354	357	0	326
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.7	12.4	12.4	40.5	27.8	27.8	32.6	0.0	29.9	30.7	0.0	31.4
Incr Delay (d2), s/veh	14.5	12.2	11.9	0.8	14.3	14.2	6.9	0.0	1.3	2.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.8	11.0	0.4	15.0	15.3	5.4	0.0	1.6	2.7	0.0	3.4
LnGrp Delay(d),s/veh	54.2	24.6	24.3	41.3	42.1	42.0	39.4	0.0	31.2	33.2	0.0	35.4
LnGrp LOS	D	C	C	D	D	D	D		C	C		D
Approach Vol, veh/h		1103			1105			280			255	
Approach Delay, s/veh		26.4			42.0			37.3			34.4	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.6	9.5	35.3		22.6	9.3	35.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.1	5.0	30.8		18.1	7.1	28.7
Max Q Clear Time (g_c+I1), s		11.6	2.8	21.1		8.7	5.7	27.8
Green Ext Time (p_c), s		0.5	0.0	4.6		0.8	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	37	9	35	23	0	12	0	18	0	267	19
Future Volume (vph)	0	37	9	35	23	0	12	0	18	0	267	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	40	10	38	25	0	13	0	20	0	290	21

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	38	25	33	311
Volume Left (vph)	0	38	0	13	0
Volume Right (vph)	10	0	0	20	21
Hadj (s)	-0.09	0.53	0.03	-0.25	-0.01
Departure Headway (s)	4.8	5.9	5.4	4.3	4.2
Degree Utilization, x	0.07	0.06	0.04	0.04	0.37
Capacity (veh/h)	691	572	626	797	824
Control Delay (s)	8.1	8.1	7.4	7.5	9.6
Approach Delay (s)	8.1	7.8		7.5	9.6
Approach LOS	A	A		A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	30.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	4	0	77	7	0	0	0	0	181	161	0
Future Volume (vph)	0	4	0	77	7	0	0	0	0	181	161	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	0	84	8	0	0	0	0	197	175	0

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	4	92	372
Volume Left (vph)	0	84	197
Volume Right (vph)	0	0	0
Hadj (s)	0.03	0.22	0.14
Departure Headway (s)	4.9	5.0	4.3
Degree Utilization, x	0.01	0.13	0.44
Capacity (veh/h)	664	667	822
Control Delay (s)	8.0	8.7	10.7
Approach Delay (s)	8.0	8.7	10.7
Approach LOS	A	A	B

Intersection Summary			
Delay	10.3		
Level of Service	B		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
4: US 101 SB On Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	393	60	46	91	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	393	60	46	91	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	427	65	50	99	0	0	0	0	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	99			492			658	658	460	658	691	99
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	99			492			658	658	460	658	691	99
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			100	100	100	100	100	100
cM capacity (veh/h)	1494			1071			364	366	602	364	351	957

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	492	149	0
Volume Left	0	50	0
Volume Right	65	0	0
cSH	1700	1071	1700
Volume to Capacity	0.29	0.05	0.00
Queue Length 95th (ft)	0	4	0
Control Delay (s)	0.0	3.1	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.1	0.0
Approach LOS			A

Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization		38.3%	ICU Level of Service A
Analysis Period (min)		15	

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	208	0	0	58	13	12	22	248	0	0	0
Future Volume (vph)	1	208	0	0	58	13	12	22	248	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	226	0	0	63	14	13	24	270	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	227	77	307
Volume Left (vph)	1	0	13
Volume Right (vph)	0	14	270
Hadj (s)	0.03	-0.08	-0.49
Departure Headway (s)	4.7	4.8	4.2
Degree Utilization, x	0.30	0.10	0.35
Capacity (veh/h)	716	689	821
Control Delay (s)	9.7	8.4	9.4
Approach Delay (s)	9.7	8.4	9.4
Approach LOS	A	A	A

Intersection Summary			
Delay	9.4		
Level of Service	A		
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	267	0	0	135	83	4	0	52	0	0	0
Future Volume (Veh/h)	119	267	0	0	135	83	4	0	52	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	129	290	0	0	147	90	4	0	57	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	237			290			740	785	290	797	740	192
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	237			290			740	785	290	797	740	192
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			100			99	100	92	100	100	100
cM capacity (veh/h)	1330			1272			308	293	749	260	311	850

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	419	237	61
Volume Left	129	0	4
Volume Right	0	90	57
cSH	1330	1700	685
Volume to Capacity	0.10	0.14	0.09
Queue Length 95th (ft)	8	0	7
Control Delay (s)	3.1	0.0	10.8
Lane LOS	A		B
Approach Delay (s)	3.1	0.0	10.8
Approach LOS			B

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 5.6 sec = LOS A

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	118	58	180	31	55	5	111	59	36	3	28	33
Future Volume (vph)	118	58	180	31	55	5	111	59	36	3	28	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	128	63	196	34	60	5	121	64	39	3	30	36

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	387	99	224	69
Volume Left (vph)	128	34	121	3
Volume Right (vph)	196	5	39	36
Hadj (s)	-0.20	0.07	0.04	-0.27
Departure Headway (s)	4.6	5.3	5.3	5.2
Degree Utilization, x	0.50	0.15	0.33	0.10
Capacity (veh/h)	738	621	627	607
Control Delay (s)	12.2	9.2	10.8	8.8
Approach Delay (s)	12.2	9.2	10.8	8.8
Approach LOS	B	A	B	A

Intersection Summary			
Delay	11.1		
Level of Service	B		
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	17	151	5	1	57	3	12	11	24	16	15	35
Future Volume (vph)	17	151	5	1	57	3	12	11	24	16	15	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	164	5	1	62	3	13	12	26	17	16	38

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	187	66	51	71
Volume Left (vph)	18	1	13	17
Volume Right (vph)	5	3	26	38
Hadj (s)	0.04	0.01	-0.22	-0.24
Departure Headway (s)	4.3	4.4	4.3	4.3
Degree Utilization, x	0.22	0.08	0.06	0.08
Capacity (veh/h)	815	779	775	779
Control Delay (s)	8.5	7.8	7.6	7.7
Approach Delay (s)	8.5	7.8	7.6	7.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	103	85	13	18	0	0	0	0	8	169	38
Future Volume (vph)	0	103	85	13	18	0	0	0	0	8	169	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	112	92	14	20	0	0	0	0	9	184	41

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	204	34	234
Volume Left (vph)	0	14	9
Volume Right (vph)	92	0	41
Hadj (s)	-0.24	0.12	-0.06
Departure Headway (s)	4.3	4.8	4.4
Degree Utilization, x	0.24	0.05	0.28
Capacity (veh/h)	796	696	785
Control Delay (s)	8.6	8.0	9.1
Approach Delay (s)	8.6	8.0	9.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	30.8%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	99	5	0	0	11	2	20	163	13	0	0	0
Future Volume (vph)	99	5	0	0	11	2	20	163	13	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	108	5	0	0	12	2	22	177	14	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	113	14	213
Volume Left (vph)	108	0	22
Volume Right (vph)	0	2	14
Hadj (s)	0.23	-0.05	0.02
Departure Headway (s)	4.6	4.5	4.2
Degree Utilization, x	0.15	0.02	0.25
Capacity (veh/h)	734	750	826
Control Delay (s)	8.4	7.6	8.6
Approach Delay (s)	8.4	7.6	8.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	29.6%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION)
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	988	7	7	733	18	5	0	7	5	1	32
Future Volume (Veh/h)	45	988	7	7	733	18	5	0	7	5	1	32
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	1074	8	8	797	20	5	0	8	5	1	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.85						0.85	0.85		0.85	0.85	0.85
vC, conflicting volume	817			1082			1626	2009	541	1466	2003	408
vC1, stage 1 conf vol							1176	1176		823	823	
vC2, stage 2 conf vol							450	833		643	1180	
vCu, unblocked vol	424			1082			1379	1831	541	1190	1823	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			97	100	98	98	100	96
cM capacity (veh/h)	959			640			186	217	485	315	215	919

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	49	716	366	8	531	286	13	41
Volume Left	49	0	0	8	0	0	5	5
Volume Right	0	0	8	0	0	20	8	35
cSH	959	1700	1700	640	1700	1700	300	700
Volume to Capacity	0.05	0.42	0.22	0.01	0.31	0.17	0.04	0.06
Queue Length 95th (ft)	4	0	0	1	0	0	3	5
Control Delay (s)	9.0	0.0	0.0	10.7	0.0	0.0	17.6	10.5
Lane LOS	A			B			C	B
Approach Delay (s)	0.4			0.1			17.6	10.5
Approach LOS							C	B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 10.7 SEC = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	791	101	68	567	50	81	18	67	127	31	104
Future Volume (veh/h)	117	791	101	68	567	50	81	18	67	127	31	104
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	127	860	110	74	616	54	88	20	73	138	34	113
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	1138	146	95	1063	93	114	472	401	174	509	456
Arrive On Green	0.09	0.36	0.36	0.05	0.32	0.32	0.06	0.25	0.25	0.10	0.29	0.29
Sat Flow, veh/h	1774	3157	404	1774	3293	288	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	127	482	488	74	331	339	88	20	73	138	34	113
Grp Sat Flow(s),veh/h/ln	1774	1770	1791	1774	1770	1812	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	5.4	18.4	18.4	3.2	12.0	12.0	3.8	0.6	2.8	5.8	1.1	4.2
Cycle Q Clear(g_c), s	5.4	18.4	18.4	3.2	12.0	12.0	3.8	0.6	2.8	5.8	1.1	4.2
Prop In Lane	1.00		0.23	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	638	646	95	571	585	114	472	401	174	509	456
V/C Ratio(X)	0.78	0.76	0.76	0.78	0.58	0.58	0.77	0.04	0.18	0.79	0.07	0.25
Avail Cap(c_a), veh/h	302	725	734	196	619	634	235	472	401	288	509	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	21.6	21.6	35.9	21.7	21.7	35.4	21.7	22.5	33.9	19.9	21.0
Incr Delay (d2), s/veh	8.0	4.0	4.0	12.6	1.2	1.2	10.6	0.2	1.0	7.8	0.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	9.7	9.8	1.9	6.0	6.1	2.2	0.3	1.3	3.3	0.6	2.0
LnGrp Delay(d),s/veh	42.2	25.6	25.6	48.5	22.9	22.9	46.0	21.8	23.5	41.7	20.1	22.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1097			744			181			285	
Approach Delay, s/veh		27.5			25.4			34.2			31.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	24.0	8.6	32.2	9.4	26.6	11.5	29.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	19.5	8.5	31.5	10.2	21.8	13.1	26.9
Max Q Clear Time (g_c+I1), s	7.8	4.8	5.2	20.4	5.8	6.2	7.4	14.0
Green Ext Time (p_c), s	0.1	1.0	0.0	7.3	0.1	1.0	0.1	8.2

Intersection Summary	
HCM 2010 Ctrl Delay	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	866	113	209	572	0	0	0	0	130	0	107
Future Volume (veh/h)	0	866	113	209	572	0	0	0	0	130	0	107
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	941	123	227	622	0				141	0	116
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1312	171	408	2466	0				361	0	322
Arrive On Green	0.00	0.42	0.42	0.23	0.70	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3241	411	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	529	535	227	622	0				141	0	116
Grp Sat Flow(s),veh/h/ln	0	1770	1790	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	22.4	22.4	10.2	5.8	0.0				6.2	0.0	5.7
Cycle Q Clear(g_c), s	0.0	22.4	22.4	10.2	5.8	0.0				6.2	0.0	5.7
Prop In Lane	0.00		0.23	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	737	746	408	2466	0				361	0	322
V/C Ratio(X)	0.00	0.72	0.72	0.56	0.25	0.00				0.39	0.00	0.36
Avail Cap(c_a), veh/h	0	737	746	408	2466	0				361	0	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.58	0.58	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	21.8	30.6	5.0	0.0				31.0	0.0	30.8
Incr Delay (d2), s/veh	0.0	3.5	3.5	1.5	0.0	0.0				3.2	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.6	11.7	5.1	2.8	0.0				3.3	0.0	2.8
LnGrp Delay(d),s/veh	0.0	25.4	25.3	32.0	5.1	0.0				34.2	0.0	33.9
LnGrp LOS		C	C	C	A					C		C
Approach Vol, veh/h		1064			849						257	
Approach Delay, s/veh		25.3			12.3						34.1	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			25.2	42.0		22.8		67.2
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			20.7	37.5		18.3		62.7
Max Q Clear Time (g_c+I1), s			12.2	24.4		8.2		7.8
Green Ext Time (p_c), s			3.2	5.8		0.8		5.8

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	953	0	0	730	113	66	0	95	0	0	0
Future Volume (veh/h)	53	953	0	0	730	113	66	0	95	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	58	1036	0	0	793	123	72	0	103			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	75	2340	0	0	1747	271	424	0	378			
Arrive On Green	0.09	1.00	0.00	0.00	0.57	0.57	0.24	0.00	0.24			
Sat Flow, veh/h	1774	3632	0	0	3165	476	1774	0	1583			
Grp Volume(v), veh/h	58	1036	0	0	457	459	72	0	103			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1779	1774	0	1583			
Q Serve(g_s), s	2.9	0.0	0.0	0.0	13.5	13.5	2.9	0.0	4.8			
Cycle Q Clear(g_c), s	2.9	0.0	0.0	0.0	13.5	13.5	2.9	0.0	4.8			
Prop In Lane	1.00		0.00	0.00		0.27	1.00		1.00			
Lane Grp Cap(c), veh/h	75	2340	0	0	1006	1011	424	0	378			
V/C Ratio(X)	0.77	0.44	0.00	0.00	0.45	0.45	0.17	0.00	0.27			
Avail Cap(c_a), veh/h	207	2340	0	0	1006	1011	424	0	378			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	0.57	0.57	1.00	0.00	1.00			
Uniform Delay (d), s/veh	40.7	0.0	0.0	0.0	11.3	11.3	27.2	0.0	27.9			
Incr Delay (d2), s/veh	9.6	0.4	0.0	0.0	0.2	0.2	0.9	0.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.6	0.1	0.0	0.0	6.6	6.7	1.5	0.0	2.3			
LnGrp Delay(d),s/veh	50.3	0.4	0.0	0.0	11.5	11.5	28.0	0.0	29.7			
LnGrp LOS	D	A			B	B	C		C			
Approach Vol, veh/h		1094			916			175				
Approach Delay, s/veh		3.0			11.5			29.0				
Approach LOS		A			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		26.0		64.0			8.3	55.7
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		21.5		59.5			10.5	44.5
Max Q Clear Time (g_c+I1), s		6.8		2.0			4.9	15.5
Green Ext Time (p_c), s		0.6		23.8			0.0	17.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	939	30	6	660	96	61	10	8	113	6	91
Future Volume (veh/h)	67	939	30	6	660	96	61	10	8	113	6	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	73	1021	33	7	717	104	66	11	9	123	7	99
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	1361	44	16	970	141	357	191	156	357	21	300
Arrive On Green	0.11	0.52	0.52	0.01	0.31	0.31	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1774	3499	113	1774	3103	450	1774	949	777	1774	106	1494
Grp Volume(v), veh/h	73	516	538	7	409	412	66	0	20	123	0	106
Grp Sat Flow(s),veh/h/ln	1774	1770	1843	1774	1770	1783	1774	0	1726	1774	0	1599
Q Serve(g_s), s	3.5	20.7	20.7	0.4	18.6	18.6	2.8	0.0	0.8	5.4	0.0	5.1
Cycle Q Clear(g_c), s	3.5	20.7	20.7	0.4	18.6	18.6	2.8	0.0	0.8	5.4	0.0	5.1
Prop In Lane	1.00		0.06	1.00		0.25	1.00		0.45	1.00		0.93
Lane Grp Cap(c), veh/h	151	688	717	16	553	558	357	0	347	357	0	322
V/C Ratio(X)	0.48	0.75	0.75	0.44	0.74	0.74	0.18	0.00	0.06	0.34	0.00	0.33
Avail Cap(c_a), veh/h	151	688	717	101	564	569	357	0	347	357	0	322
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	18.3	18.3	44.4	27.6	27.6	29.8	0.0	29.1	30.9	0.0	30.8
Incr Delay (d2), s/veh	2.2	6.7	6.5	18.2	5.0	5.0	1.1	0.0	0.3	2.6	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.3	11.7	0.3	9.9	9.9	1.5	0.0	0.4	2.9	0.0	2.5
LnGrp Delay(d),s/veh	40.2	25.0	24.8	62.6	32.6	32.6	31.0	0.0	29.4	33.5	0.0	33.5
LnGrp LOS	D	C	C	E	C	C	C		C	C		C
Approach Vol, veh/h		1127			828			86			229	
Approach Delay, s/veh		25.9			32.9			30.6			33.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	22.6	5.3	39.5	22.6	22.6	12.2	32.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.1	18.1	5.1	30.7	18.1	18.1	7.1	28.7
Max Q Clear Time (g_c+I1), s	7.4	2.8	2.4	22.7	4.8	7.1	5.5	20.6
Green Ext Time (p_c), s	0.4	0.0	0.0	4.2	0.4	0.4	1.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.4
HCM 2010 LOS	C

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	36	10	39	43	0	4	0	18	0	234	32
Future Volume (vph)	0	36	10	39	43	0	4	0	18	0	234	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	39	11	42	47	0	4	0	20	0	254	35

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	42	47	24	289
Volume Left (vph)	0	42	0	4	0
Volume Right (vph)	11	0	0	20	35
Hadj (s)	-0.10	0.53	0.03	-0.43	-0.04
Departure Headway (s)	4.7	5.8	5.3	4.1	4.3
Degree Utilization, x	0.07	0.07	0.07	0.03	0.34
Capacity (veh/h)	700	582	638	817	817
Control Delay (s)	8.1	8.0	7.5	7.3	9.4
Approach Delay (s)	8.1	7.7		7.3	9.4
Approach LOS	A	A		A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	3	1	175	2	0	0	0	0	139	144	3
Future Volume (vph)	0	3	1	175	2	0	0	0	0	139	144	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	190	2	0	0	0	0	151	157	3

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	4	192	311
Volume Left (vph)	0	190	151
Volume Right (vph)	1	0	3
Hadj (s)	-0.12	0.23	0.13
Departure Headway (s)	4.8	4.9	4.5
Degree Utilization, x	0.01	0.26	0.39
Capacity (veh/h)	683	691	768
Control Delay (s)	7.8	9.6	10.4
Approach Delay (s)	7.8	9.6	10.4
Approach LOS	A	A	B

Intersection Summary			
Delay	10.1		
Level of Service	B		
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	137	0	0	160	55	19	17	181	0	0	0
Future Volume (vph)	3	137	0	0	160	55	19	17	181	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	149	0	0	174	60	21	18	197	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	152	234	236
Volume Left (vph)	3	0	21
Volume Right (vph)	0	60	197
Hadj (s)	0.04	-0.12	-0.45
Departure Headway (s)	4.8	4.5	4.4
Degree Utilization, x	0.20	0.29	0.29
Capacity (veh/h)	706	752	772
Control Delay (s)	9.0	9.4	9.1
Approach Delay (s)	9.0	9.4	9.1
Approach LOS	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	323	23	56	222	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	323	23	56	222	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	351	25	61	241	0	0	0	0	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	241			376			726	726	364	726	739	241
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	241			376			726	726	364	726	739	241
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			100	100	100	100	100	100
cM capacity (veh/h)	1326			1182			326	333	681	326	327	798

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	376	302	0
Volume Left	0	61	0
Volume Right	25	0	0
cSH	1700	1182	1700
Volume to Capacity	0.22	0.05	0.00
Queue Length 95th (ft)	0	4	0
Control Delay (s)	0.0	2.1	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	2.1	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	207	0	0	243	175	34	0	74	0	0	0
Future Volume (Veh/h)	116	207	0	0	243	175	34	0	74	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	126	225	0	0	264	190	37	0	80	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	454			225			836	931	225	916	836	359
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	454			225			836	931	225	916	836	359
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	89			100			86	100	90	100	100	100
cM capacity (veh/h)	1107			1344			262	236	814	208	269	685

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	351	454	117
Volume Left	126	0	37
Volume Right	0	190	80
cSH	1107	1700	488
Volume to Capacity	0.11	0.27	0.24
Queue Length 95th (ft)	10	0	23
Control Delay (s)	3.8	0.0	14.7
Lane LOS	A		B
Approach Delay (s)	3.8	0.0	14.7
Approach LOS			B

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

AWD = 6.5 sec = LOS A

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	54	60	166	36	67	4	200	55	45	4	86	146
Future Volume (vph)	54	60	166	36	67	4	200	55	45	4	86	146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	59	65	180	39	73	4	217	60	49	4	93	159

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	304	116	326	256
Volume Left (vph)	59	39	217	4
Volume Right (vph)	180	4	49	159
Hadj (s)	-0.28	0.08	0.08	-0.34
Departure Headway (s)	5.5	6.2	5.6	5.4
Degree Utilization, x	0.46	0.20	0.51	0.38
Capacity (veh/h)	603	488	594	609
Control Delay (s)	13.1	10.8	14.4	11.7
Approach Delay (s)	13.1	10.8	14.4	11.7
Approach LOS	B	B	B	B

Intersection Summary			
Delay	12.9		
Level of Service	B		
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	12	103	6	6	92	7	22	33	13	10	21	25
Future Volume (vph)	12	103	6	6	92	7	22	33	13	10	21	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	112	7	7	100	8	24	36	14	11	23	27

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	132	115	74	61
Volume Left (vph)	13	7	24	11
Volume Right (vph)	7	8	14	27
Hadj (s)	0.02	0.00	-0.01	-0.20
Departure Headway (s)	4.4	4.4	4.5	4.4
Degree Utilization, x	0.16	0.14	0.09	0.07
Capacity (veh/h)	794	784	748	767
Control Delay (s)	8.2	8.1	8.0	7.7
Approach Delay (s)	8.2	8.1	8.0	7.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	70	60	24	34	0	0	0	0	17	209	68
Future Volume (vph)	0	70	60	24	34	0	0	0	0	17	209	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	76	65	26	37	0	0	0	0	18	227	74

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	141	63	319
Volume Left (vph)	0	26	18
Volume Right (vph)	65	0	74
Hadj (s)	-0.24	0.12	-0.09
Departure Headway (s)	4.5	4.9	4.3
Degree Utilization, x	0.18	0.09	0.38
Capacity (veh/h)	744	673	808
Control Delay (s)	8.4	8.4	9.9
Approach Delay (s)	8.4	8.4	9.9
Approach LOS	A	A	A

Intersection Summary			
Delay	9.3		
Level of Service	A		
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	77	10	0	0	20	10	51	134	9	0	0	0
Future Volume (vph)	77	10	0	0	20	10	51	134	9	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	84	11	0	0	22	11	55	146	10	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	95	33	211
Volume Left (vph)	84	0	55
Volume Right (vph)	0	11	10
Hadj (s)	0.21	-0.17	0.06
Departure Headway (s)	4.6	4.3	4.3
Degree Utilization, x	0.12	0.04	0.25
Capacity (veh/h)	731	775	818
Control Delay (s)	8.3	7.5	8.7
Approach Delay (s)	8.3	7.5	8.7
Approach LOS	A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION)
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	867	7	25	1144	49	14	3	9	9	0	16
Future Volume (Veh/h)	42	867	7	25	1144	49	14	3	9	9	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	942	8	27	1243	53	15	3	10	10	0	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.71						0.71	0.71		0.71	0.71	0.71
vC, conflicting volume	1296			950			1730	2388	475	1898	2366	648
vC1, stage 1 conf vol							1038	1038		1324	1324	
vC2, stage 2 conf vol							692	1350		574	1042	
vCu, unblocked vol	604			950			1215	2139	475	1450	2108	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			96			93	98	98	96	100	98
cM capacity (veh/h)	690			719			218	188	536	236	195	771

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	46	628	322	27	829	467	28	27
Volume Left	46	0	0	27	0	0	15	10
Volume Right	0	0	8	0	0	53	10	17
cSH	690	1700	1700	719	1700	1700	271	419
Volume to Capacity	0.07	0.37	0.19	0.04	0.49	0.27	0.10	0.06
Queue Length 95th (ft)	5	0	0	3	0	0	9	5
Control Delay (s)	10.6	0.0	0.0	10.2	0.0	0.0	19.8	14.2
Lane LOS	B			B			C	B
Approach Delay (s)	0.5			0.2			19.8	14.2
Approach LOS							C	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 13.3 sec = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	725	78	109	951	84	123	36	99	136	28	156
Future Volume (veh/h)	82	725	78	109	951	84	123	36	99	136	28	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	89	788	85	118	1034	91	134	39	108	148	30	170
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	1145	123	149	1234	109	167	454	385	183	446	399
Arrive On Green	0.06	0.36	0.36	0.08	0.37	0.37	0.09	0.24	0.24	0.10	0.25	0.25
Sat Flow, veh/h	1774	3223	348	1774	3292	290	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	89	433	440	118	556	569	134	39	108	148	30	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1812	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	4.2	17.5	17.5	5.5	24.0	24.1	6.2	1.4	4.7	6.9	1.1	7.6
Cycle Q Clear(g_c), s	4.2	17.5	17.5	5.5	24.0	24.1	6.2	1.4	4.7	6.9	1.1	7.6
Prop In Lane	1.00		0.19	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	629	640	149	663	679	167	454	385	183	446	399
V/C Ratio(X)	0.78	0.69	0.69	0.79	0.84	0.84	0.80	0.09	0.28	0.81	0.07	0.43
Avail Cap(c_a), veh/h	160	649	660	201	689	705	222	454	385	243	446	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	23.1	23.1	37.8	23.9	23.9	37.3	24.6	25.8	36.9	23.9	26.3
Incr Delay (d2), s/veh	14.7	3.0	2.9	14.2	8.7	8.6	14.2	0.4	1.8	13.9	0.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	9.0	9.2	3.3	13.3	13.6	3.7	0.7	2.2	4.1	0.6	3.7
LnGrp Delay(d),s/veh	53.5	26.1	26.0	52.0	32.7	32.5	51.5	24.9	27.6	50.8	24.2	29.6
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		962			1243			281			348	
Approach Delay, s/veh		28.6			34.4			38.6			38.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	25.0	11.6	34.3	12.4	25.7	9.9	36.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	20.2	9.5	30.8	10.5	21.2	7.6	32.7
Max Q Clear Time (g_c+I1), s	8.9	6.7	7.5	19.5	8.2	9.6	6.2	26.1
Green Ext Time (p_c), s	0.1	1.5	0.0	8.6	0.1	1.4	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	873	104	118	1058	0	0	0	0	135	0	85
Future Volume (veh/h)	0	873	104	118	1058	0	0	0	0	135	0	85
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	949	113	128	1150	0				147	0	92
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1526	182	289	2440	0				383	0	342
Arrive On Green	0.00	0.48	0.48	0.16	0.69	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3279	379	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	527	535	128	1150	0				147	0	92
Grp Sat Flow(s),veh/h/ln	0	1770	1796	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	21.0	21.0	6.2	14.2	0.0				6.7	0.0	4.6
Cycle Q Clear(g_c), s	0.0	21.0	21.0	6.2	14.2	0.0				6.7	0.0	4.6
Prop In Lane	0.00		0.21	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	848	860	289	2440	0				383	0	342
V/C Ratio(X)	0.00	0.62	0.62	0.44	0.47	0.00				0.38	0.00	0.27
Avail Cap(c_a), veh/h	0	848	860	289	2440	0				383	0	342
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.65	0.65	0.50	0.50	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.4	18.4	35.9	6.8	0.0				31.9	0.0	31.0
Incr Delay (d2), s/veh	0.0	2.3	2.2	0.5	0.1	0.0				2.9	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	10.9	3.1	6.9	0.0				3.6	0.0	2.2
LnGrp Delay(d),s/veh	0.0	20.6	20.6	36.4	6.9	0.0				34.8	0.0	32.9
LnGrp LOS		C	C	D	A					C		C
Approach Vol, veh/h		1062			1278						239	
Approach Delay, s/veh		20.6			9.8						34.1	
Approach LOS		C			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			20.0	50.0		25.0		70.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			15.5	45.5		20.5		65.5
Max Q Clear Time (g_c+I1), s			8.2	23.0		8.7		16.2
Green Ext Time (p_c), s			4.6	7.6		0.8		12.2

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	879	0	0	1095	197	94	0	285	0	0	0
Future Volume (veh/h)	123	879	0	0	1095	197	94	0	285	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	134	955	0	0	1190	214	102	0	310			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	163	2366	0	0	1588	284	420	0	375			
Arrive On Green	0.18	1.00	0.00	0.00	0.53	0.53	0.24	0.00	0.24			
Sat Flow, veh/h	1774	3632	0	0	3094	537	1774	0	1583			
Grp Volume(v), veh/h	134	955	0	0	699	705	102	0	310			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1768	1774	0	1583			
Q Serve(g_s), s	6.9	0.0	0.0	0.0	29.2	29.7	4.4	0.0	17.7			
Cycle Q Clear(g_c), s	6.9	0.0	0.0	0.0	29.2	29.7	4.4	0.0	17.7			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		1.00			
Lane Grp Cap(c), veh/h	163	2366	0	0	936	935	420	0	375			
V/C Ratio(X)	0.82	0.40	0.00	0.00	0.75	0.75	0.24	0.00	0.83			
Avail Cap(c_a), veh/h	233	2366	0	0	936	935	420	0	375			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.73	0.73	0.00	0.00	0.24	0.24	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.0	0.0	0.0	0.0	17.4	17.5	29.4	0.0	34.4			
Incr Delay (d2), s/veh	10.9	0.4	0.0	0.0	0.8	0.9	1.4	0.0	18.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	0.1	0.0	0.0	14.4	14.5	2.3	0.0	9.6			
LnGrp Delay(d),s/veh	48.9	0.4	0.0	0.0	18.2	18.4	30.7	0.0	52.9			
LnGrp LOS	D	A			B	B	C		D			
Approach Vol, veh/h		1089			1404			412				
Approach Delay, s/veh		6.3			18.3			47.4				
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.0		68.0			13.2	54.8
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		22.5		63.5			12.5	46.5
Max Q Clear Time (g_c+I1), s		19.7		2.0			8.9	31.7
Green Ext Time (p_c), s		0.5		34.2			0.1	12.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	859	72	16	950	122	192	46	21	132	19	140
Future Volume (veh/h)	123	859	72	16	950	122	192	46	21	132	19	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	134	934	78	17	1033	133	209	50	23	143	21	152
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	1250	104	93	1071	138	338	230	106	336	37	268
Arrive On Green	0.18	0.76	0.76	0.05	0.34	0.34	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1774	3307	276	1774	3155	406	1774	1209	556	1774	196	1417
Grp Volume(v), veh/h	134	500	512	17	579	587	209	0	73	143	0	173
Grp Sat Flow(s),veh/h/ln	1774	1770	1814	1774	1770	1791	1774	0	1765	1774	0	1613
Q Serve(g_s), s	6.9	15.1	15.1	0.9	30.5	30.6	10.3	0.0	3.3	6.8	0.0	9.3
Cycle Q Clear(g_c), s	6.9	15.1	15.1	0.9	30.5	30.6	10.3	0.0	3.3	6.8	0.0	9.3
Prop In Lane	1.00		0.15	1.00		0.23	1.00		0.32	1.00		0.88
Lane Grp Cap(c), veh/h	162	669	686	93	601	608	338	0	336	336	0	306
V/C Ratio(X)	0.83	0.75	0.75	0.18	0.96	0.97	0.62	0.00	0.22	0.43	0.00	0.57
Avail Cap(c_a), veh/h	168	669	686	93	601	608	338	0	336	336	0	306
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	9.1	9.1	43.0	30.8	30.8	35.3	0.0	32.5	33.9	0.0	35.0
Incr Delay (d2), s/veh	24.8	6.7	6.5	0.9	27.9	28.0	8.2	0.0	1.5	3.9	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.0	8.2	0.4	19.4	19.7	5.8	0.0	1.8	3.7	0.0	4.8
LnGrp Delay(d),s/veh	62.9	15.7	15.6	44.0	58.7	58.8	43.5	0.0	33.9	37.8	0.0	42.4
LnGrp LOS	E	B	B	D	E	E	D		C	D		D
Approach Vol, veh/h		1146			1183			282			316	
Approach Delay, s/veh		21.2			58.5			41.0			40.3	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	22.6	9.5	40.4	22.6	22.5	13.2	36.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.1	5.0	35.9	18.1	18.0	9.0	31.9
Max Q Clear Time (g_c+I1), s	8.8	5.3	2.9	17.1	12.3	11.3	8.9	32.6
Green Ext Time (p_c), s	0.2	0.8	0.1	6.6	0.5	0.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	37	9	35	23	0	12	0	18	0	271	19
Future Volume (vph)	0	37	9	35	23	0	12	0	18	0	271	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	40	10	38	25	0	13	0	20	0	295	21

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	38	25	33	316
Volume Left (vph)	0	38	0	13	0
Volume Right (vph)	10	0	0	20	21
Hadj (s)	-0.09	0.53	0.03	-0.25	-0.01
Departure Headway (s)	4.8	5.9	5.4	4.3	4.2
Degree Utilization, x	0.07	0.06	0.04	0.04	0.37
Capacity (veh/h)	689	571	624	796	824
Control Delay (s)	8.1	8.1	7.4	7.5	9.7
Approach Delay (s)	8.1	7.8		7.5	9.7
Approach LOS	A	A		A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	30.7%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	4	0	83	7	0	0	0	0	181	165	0
Future Volume (vph)	0	4	0	83	7	0	0	0	0	181	165	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	4	0	90	8	0	0	0	0	197	179	0

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	4	98	376
Volume Left (vph)	0	90	197
Volume Right (vph)	0	0	0
Hadj (s)	0.03	0.22	0.14
Departure Headway (s)	5.0	5.0	4.3
Degree Utilization, x	0.01	0.14	0.45
Capacity (veh/h)	661	665	819
Control Delay (s)	8.0	8.8	10.8
Approach Delay (s)	8.0	8.8	10.8
Approach LOS	A	A	B

Intersection Summary			
Delay	10.4		
Level of Service	B		
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	208	0	0	62	13	14	22	257	0	0	0
Future Volume (vph)	1	208	0	0	62	13	14	22	257	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	226	0	0	67	14	15	24	279	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	227	81	318
Volume Left (vph)	1	0	15
Volume Right (vph)	0	14	279
Hadj (s)	0.03	-0.07	-0.48
Departure Headway (s)	4.8	4.8	4.2
Degree Utilization, x	0.30	0.11	0.37
Capacity (veh/h)	710	683	818
Control Delay (s)	9.8	8.4	9.6
Approach Delay (s)	9.8	8.4	9.6
Approach LOS	A	A	A

Intersection Summary			
Delay	9.5		
Level of Service	A		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
4: US 101 SB On Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	402	60	46	95	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	402	60	46	95	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	437	65	50	103	0	0	0	0	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	103			502			672	672	470	672	705	103
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	103			502			672	672	470	672	705	103
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			100	100	100	100	100	100
cM capacity (veh/h)	1489			1062			356	359	594	356	344	952

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	502	153	0
Volume Left	0	50	0
Volume Right	65	0	0
cSH	1700	1062	1700
Volume to Capacity	0.30	0.05	0.00
Queue Length 95th (ft)	0	4	0
Control Delay (s)	0.0	3.1	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.1	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	270	0	0	137	83	6	0	52	0	0	0
Future Volume (Veh/h)	125	270	0	0	137	83	6	0	52	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	136	293	0	0	149	90	7	0	57	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	239			293			759	804	293	816	759	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	239			293			759	804	293	816	759	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			100			98	100	92	100	100	100
cM capacity (veh/h)	1328			1269			298	284	746	252	302	847

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	429	239	64
Volume Left	136	0	7
Volume Right	0	90	57
cSH	1328	1700	641
Volume to Capacity	0.10	0.14	0.10
Queue Length 95th (ft)	9	0	8
Control Delay (s)	3.2	0.0	11.2
Lane LOS	A		B
Approach Delay (s)	3.2	0.0	11.2
Approach LOS			B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 5.8 SEC = LOS A

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	118	58	180	31	55	5	113	59	36	3	28	33
Future Volume (vph)	118	58	180	31	55	5	113	59	36	3	28	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	128	63	196	34	60	5	123	64	39	3	30	36

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	387	99	226	69
Volume Left (vph)	128	34	123	3
Volume Right (vph)	196	5	39	36
Hadj (s)	-0.20	0.07	0.04	-0.27
Departure Headway (s)	4.7	5.3	5.3	5.2
Degree Utilization, x	0.50	0.15	0.33	0.10
Capacity (veh/h)	737	620	626	606
Control Delay (s)	12.2	9.2	10.8	8.8
Approach Delay (s)	12.2	9.2	10.8	8.8
Approach LOS	B	A	B	A

Intersection Summary			
Delay	11.1		
Level of Service	B		
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	17	153	5	1	60	3	12	11	24	16	15	35
Future Volume (vph)	17	153	5	1	60	3	12	11	24	16	15	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	166	5	1	65	3	13	12	26	17	16	38

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	189	69	51	71
Volume Left (vph)	18	1	13	17
Volume Right (vph)	5	3	26	38
Hadj (s)	0.04	0.01	-0.22	-0.24
Departure Headway (s)	4.3	4.4	4.3	4.3
Degree Utilization, x	0.23	0.08	0.06	0.08
Capacity (veh/h)	815	778	772	776
Control Delay (s)	8.5	7.8	7.6	7.7
Approach Delay (s)	8.5	7.8	7.6	7.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	104	86	13	18	0	0	0	0	10	177	40
Future Volume (vph)	0	104	86	13	18	0	0	0	0	10	177	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	113	93	14	20	0	0	0	0	11	192	43

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	206	34	246
Volume Left (vph)	0	14	11
Volume Right (vph)	93	0	43
Hadj (s)	-0.24	0.12	-0.06
Departure Headway (s)	4.3	4.8	4.4
Degree Utilization, x	0.25	0.05	0.30
Capacity (veh/h)	790	690	784
Control Delay (s)	8.7	8.1	9.3
Approach Delay (s)	8.7	8.1	9.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	103	5	0	0	11	2	21	167	13	0	0	0
Future Volume (vph)	103	5	0	0	11	2	21	167	13	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	112	5	0	0	12	2	23	182	14	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	117	14	219
Volume Left (vph)	112	0	23
Volume Right (vph)	0	2	14
Hadj (s)	0.23	-0.05	0.02
Departure Headway (s)	4.6	4.5	4.2
Degree Utilization, x	0.15	0.02	0.26
Capacity (veh/h)	731	746	823
Control Delay (s)	8.5	7.6	8.7
Approach Delay (s)	8.5	7.6	8.7
Approach LOS	A	A	A

Intersection Summary			
Delay	8.6		
Level of Service	A		
Intersection Capacity Utilization	30.0%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM AM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	989	7	7	735	18	5	0	7	5	1	32
Future Volume (Veh/h)	45	989	7	7	735	18	5	0	7	5	1	32
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	1075	8	8	799	20	5	0	8	5	1	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	819			1083			1628	2012	542	1468	2006	410
vC1, stage 1 conf vol							1177	1177		825	825	
vC2, stage 2 conf vol							451	835		644	1181	
vCu, unblocked vol	414			1083			1373	1829	542	1184	1821	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			97	100	98	98	100	96
cM capacity (veh/h)	963			640			186	217	485	316	215	914

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	49	717	366	8	533	286	13	41
Volume Left	49	0	0	8	0	0	5	5
Volume Right	0	0	8	0	0	20	8	35
cSH	963	1700	1700	640	1700	1700	299	698
Volume to Capacity	0.05	0.42	0.22	0.01	0.31	0.17	0.04	0.06
Queue Length 95th (ft)	4	0	0	1	0	0	3	5
Control Delay (s)	8.9	0.0	0.0	10.7	0.0	0.0	17.6	10.5
Lane LOS	A			B			C	B
Approach Delay (s)	0.4			0.1			17.6	10.5
Approach LOS							C	B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 10.6 SEC = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	791	102	71	567	54	83	19	71	136	35	107
Future Volume (veh/h)	119	791	102	71	567	54	83	19	71	136	35	107
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	860	111	77	616	59	90	21	77	148	38	116
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	1104	142	99	1023	98	116	487	414	186	532	476
Arrive On Green	0.09	0.35	0.35	0.06	0.31	0.31	0.07	0.26	0.26	0.10	0.30	0.30
Sat Flow, veh/h	1774	3154	407	1774	3265	312	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	129	483	488	77	333	342	90	21	77	148	38	116
Grp Sat Flow(s),veh/h/ln	1774	1770	1791	1774	1770	1808	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	5.6	19.2	19.2	3.4	12.6	12.6	3.9	0.7	3.0	6.4	1.2	4.4
Cycle Q Clear(g_c), s	5.6	19.2	19.2	3.4	12.6	12.6	3.9	0.7	3.0	6.4	1.2	4.4
Prop In Lane	1.00		0.23	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	619	627	99	555	567	116	487	414	186	532	476
V/C Ratio(X)	0.79	0.78	0.78	0.78	0.60	0.60	0.77	0.04	0.19	0.80	0.07	0.24
Avail Cap(c_a), veh/h	286	684	693	169	568	580	232	487	414	304	532	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	22.9	22.9	36.7	22.9	22.9	36.3	21.8	22.6	34.5	19.7	20.8
Incr Delay (d2), s/veh	8.1	5.2	5.2	12.2	1.7	1.7	10.4	0.2	1.0	7.6	0.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	10.3	10.4	2.0	6.4	6.5	2.3	0.4	1.4	3.6	0.6	2.1
LnGrp Delay(d),s/veh	43.2	28.2	28.1	49.0	24.6	24.6	46.7	21.9	23.6	42.1	20.0	22.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	C
Approach Vol, veh/h		1100			752			188			302	
Approach Delay, s/veh		29.9			27.1			34.5			31.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	25.1	8.9	32.1	9.7	28.2	11.8	29.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.5	20.5	7.5	30.5	10.3	23.7	12.7	25.3
Max Q Clear Time (g_c+I1), s	8.4	5.0	5.4	21.2	5.9	6.4	7.6	14.6
Green Ext Time (p_c), s	0.2	1.1	0.0	6.4	0.1	1.1	0.1	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	873	120	209	578	0	0	0	0	130	0	108
Future Volume (veh/h)	0	873	120	209	578	0	0	0	0	130	0	108
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	949	130	227	628	0				141	0	117
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1303	179	408	2466	0				361	0	322
Arrive On Green	0.00	0.42	0.42	0.23	0.70	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3221	428	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	537	542	227	628	0				141	0	117
Grp Sat Flow(s),veh/h/ln	0	1770	1787	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	22.9	22.9	10.2	5.9	0.0				6.2	0.0	5.7
Cycle Q Clear(g_c), s	0.0	22.9	22.9	10.2	5.9	0.0				6.2	0.0	5.7
Prop In Lane	0.00		0.24	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	737	745	408	2466	0				361	0	322
V/C Ratio(X)	0.00	0.73	0.73	0.56	0.25	0.00				0.39	0.00	0.36
Avail Cap(c_a), veh/h	0	737	745	408	2466	0				361	0	322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.56	0.56	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.0	22.0	30.6	5.0	0.0				31.0	0.0	30.8
Incr Delay (d2), s/veh	0.0	3.6	3.6	1.5	0.0	0.0				3.2	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.8	11.9	5.1	2.8	0.0				3.3	0.0	2.8
LnGrp Delay(d),s/veh	0.0	25.6	25.5	32.1	5.1	0.0				34.2	0.0	34.0
LnGrp LOS		C	C	C	A					C		C
Approach Vol, veh/h		1079			855						258	
Approach Delay, s/veh		25.5			12.2						34.1	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			25.2	42.0		22.8		67.2
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			20.7	37.5		18.3		62.7
Max Q Clear Time (g_c+I1), s			12.2	24.9		8.2		7.9
Green Ext Time (p_c), s			3.2	5.8		0.8		5.8

Intersection Summary	
HCM 2010 Ctrl Delay	21.4
HCM 2010 LOS	C

13: U.S. Highway 101 NB Ramps & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	957	0	0	733	113	69	0	95	0	0	0
Future Volume (veh/h)	55	957	0	0	733	113	69	0	95	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	60	1040	0	0	797	123	75	0	103			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	77	2379	0	0	1779	275	404	0	361			
Arrive On Green	0.09	1.00	0.00	0.00	0.58	0.58	0.23	0.00	0.23			
Sat Flow, veh/h	1774	3632	0	0	3167	474	1774	0	1583			
Grp Volume(v), veh/h	60	1040	0	0	459	461	75	0	103			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1779	1774	0	1583			
Q Serve(g_s), s	3.0	0.0	0.0	0.0	13.3	13.3	3.1	0.0	4.8			
Cycle Q Clear(g_c), s	3.0	0.0	0.0	0.0	13.3	13.3	3.1	0.0	4.8			
Prop In Lane	1.00		0.00	0.00		0.27	1.00		1.00			
Lane Grp Cap(c), veh/h	77	2379	0	0	1024	1030	404	0	361			
V/C Ratio(X)	0.78	0.44	0.00	0.00	0.45	0.45	0.19	0.00	0.29			
Avail Cap(c_a), veh/h	227	2379	0	0	1024	1030	404	0	361			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.65	0.65	1.00	0.00	1.00			
Uniform Delay (d), s/veh	40.7	0.0	0.0	0.0	10.8	10.8	28.0	0.0	28.7			
Incr Delay (d2), s/veh	9.7	0.3	0.0	0.0	0.2	0.2	1.0	0.0	2.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	0.1	0.0	0.0	6.4	6.5	1.6	0.0	2.3			
LnGrp Delay(d),s/veh	50.3	0.3	0.0	0.0	11.0	11.0	29.0	0.0	30.7			
LnGrp LOS	D	A			B	B	C		C			
Approach Vol, veh/h		1100			920			178				
Approach Delay, s/veh		3.1			11.0			30.0				
Approach LOS		A			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		65.0			8.4	56.6
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		20.5		60.5			11.5	44.5
Max Q Clear Time (g_c+I1), s		6.8		2.0			5.0	15.3
Green Ext Time (p_c), s		0.6		24.1			0.0	17.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	943	30	6	663	96	61	10	8	113	6	91
Future Volume (veh/h)	67	943	30	6	663	96	61	10	8	113	6	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	73	1025	33	7	721	104	66	11	9	123	7	99
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1361	44	16	934	135	357	191	156	357	21	300
Arrive On Green	0.19	0.78	0.78	0.01	0.30	0.30	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1774	3500	113	1774	3106	448	1774	949	777	1774	106	1494
Grp Volume(v), veh/h	73	518	540	7	411	414	66	0	20	123	0	106
Grp Sat Flow(s),veh/h/ln	1774	1770	1843	1774	1770	1784	1774	0	1726	1774	0	1599
Q Serve(g_s), s	3.3	14.1	14.1	0.4	19.0	19.0	2.8	0.0	0.8	5.4	0.0	5.1
Cycle Q Clear(g_c), s	3.3	14.1	14.1	0.4	19.0	19.0	2.8	0.0	0.8	5.4	0.0	5.1
Prop In Lane	1.00		0.06	1.00		0.25	1.00		0.45	1.00		0.93
Lane Grp Cap(c), veh/h	172	688	717	16	532	537	357	0	347	357	0	322
V/C Ratio(X)	0.42	0.75	0.75	0.44	0.77	0.77	0.18	0.00	0.06	0.34	0.00	0.33
Avail Cap(c_a), veh/h	172	688	717	101	560	565	357	0	347	357	0	322
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.1	7.7	7.7	44.4	28.6	28.7	29.8	0.0	29.1	30.9	0.0	30.8
Incr Delay (d2), s/veh	1.5	6.9	6.6	18.2	6.2	6.2	1.1	0.0	0.3	2.6	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	7.6	7.9	0.3	10.2	10.3	1.5	0.0	0.4	2.9	0.0	2.5
LnGrp Delay(d),s/veh	35.6	14.5	14.3	62.6	34.9	34.9	31.0	0.0	29.4	33.5	0.0	33.5
LnGrp LOS	D	B	B	E	C	C	C		C	C		C
Approach Vol, veh/h		1131			832			86			229	
Approach Delay, s/veh		15.8			35.1			30.6			33.5	
Approach LOS		B			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	22.6	5.3	39.5	22.6	22.6	13.2	31.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.1	18.1	5.1	30.7	18.1	18.1	7.3	28.5
Max Q Clear Time (g_c+I1), s	7.4	2.8	2.4	16.1	4.8	7.1	5.3	21.0
Green Ext Time (p_c), s	0.7	0.0	0.0	10.0	0.1	0.7	0.0	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	36	10	39	43	0	4	0	18	0	242	32
Future Volume (vph)	0	36	10	39	43	0	4	0	18	0	242	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	39	11	42	47	0	4	0	20	0	263	35

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	50	42	47	24	298
Volume Left (vph)	0	42	0	4	0
Volume Right (vph)	11	0	0	20	35
Hadj (s)	-0.10	0.53	0.03	-0.43	-0.04
Departure Headway (s)	4.8	5.8	5.3	4.2	4.3
Degree Utilization, x	0.07	0.07	0.07	0.03	0.35
Capacity (veh/h)	696	580	635	815	816
Control Delay (s)	8.1	8.0	7.5	7.3	9.6
Approach Delay (s)	8.1	7.8		7.3	9.6
Approach LOS	A	A		A	A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	3	1	186	2	0	0	0	0	139	152	3
Future Volume (vph)	0	3	1	186	2	0	0	0	0	139	152	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3	1	202	2	0	0	0	0	151	165	3

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	4	204	319
Volume Left (vph)	0	202	151
Volume Right (vph)	1	0	3
Hadj (s)	-0.12	0.23	0.12
Departure Headway (s)	4.9	4.9	4.6
Degree Utilization, x	0.01	0.28	0.40
Capacity (veh/h)	675	688	762
Control Delay (s)	7.9	9.8	10.6
Approach Delay (s)	7.9	9.8	10.6
Approach LOS	A	A	B

Intersection Summary			
Delay	10.3		
Level of Service	B		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	137	0	0	168	55	22	17	193	0	0	0
Future Volume (vph)	3	137	0	0	168	55	22	17	193	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	149	0	0	183	60	24	18	210	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	152	243	252
Volume Left (vph)	3	0	24
Volume Right (vph)	0	60	210
Hadj (s)	0.04	-0.11	-0.45
Departure Headway (s)	4.8	4.6	4.4
Degree Utilization, x	0.20	0.31	0.31
Capacity (veh/h)	695	742	767
Control Delay (s)	9.1	9.6	9.3
Approach Delay (s)	9.1	9.6	9.3
Approach LOS	A	A	A

Intersection Summary			
Delay	9.4		
Level of Service	A		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	335	23	56	230	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	335	23	56	230	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	364	25	61	250	0	0	0	0	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	250			389			748	748	376	748	761	250
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	250			389			748	748	376	748	761	250
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			100	100	100	100	100	100
cM capacity (veh/h)	1316			1170			315	323	670	315	318	789

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	389	311	0
Volume Left	0	61	0
Volume Right	25	0	0
cSH	1700	1170	1700
Volume to Capacity	0.23	0.05	0.00
Queue Length 95th (ft)	0	4	0
Control Delay (s)	0.0	2.0	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	2.0	0.0
Approach LOS			A

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	211	0	0	247	175	38	0	74	0	0	0
Future Volume (Veh/h)	124	211	0	0	247	175	38	0	74	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	135	229	0	0	268	190	41	0	80	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	458			229			862	957	229	942	862	363
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	458			229			862	957	229	942	862	363
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	88			100			84	100	90	100	100	100
cM capacity (veh/h)	1103			1339			249	226	810	198	257	682

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	364	458	121
Volume Left	135	0	41
Volume Right	0	190	80
cSH	1103	1700	460
Volume to Capacity	0.12	0.27	0.26
Queue Length 95th (ft)	10	0	26
Control Delay (s)	4.0	0.0	15.6
Lane LOS	A		C
Approach Delay (s)	4.0	0.0	15.6
Approach LOS			C

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

AWD = 9.5 sec = LOS A

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	54	60	170	36	67	4	204	55	45	4	86	146
Future Volume (vph)	54	60	170	36	67	4	204	55	45	4	86	146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	59	65	185	39	73	4	222	60	49	4	93	159

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	309	116	331	256
Volume Left (vph)	59	39	222	4
Volume Right (vph)	185	4	49	159
Hadj (s)	-0.29	0.08	0.08	-0.34
Departure Headway (s)	5.5	6.3	5.7	5.4
Degree Utilization, x	0.47	0.20	0.52	0.38
Capacity (veh/h)	601	484	592	605
Control Delay (s)	13.3	10.8	14.7	11.8
Approach Delay (s)	13.3	10.8	14.7	11.8
Approach LOS	B	B	B	B

Intersection Summary			
Delay	13.1		
Level of Service	B		
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	12	107	6	6	96	7	22	33	13	10	21	25
Future Volume (vph)	12	107	6	6	96	7	22	33	13	10	21	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	116	7	7	104	8	24	36	14	11	23	27

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	136	119	74	61
Volume Left (vph)	13	7	24	11
Volume Right (vph)	7	8	14	27
Hadj (s)	0.02	0.01	-0.01	-0.20
Departure Headway (s)	4.4	4.4	4.5	4.4
Degree Utilization, x	0.17	0.14	0.09	0.07
Capacity (veh/h)	793	783	743	762
Control Delay (s)	8.2	8.1	8.0	7.7
Approach Delay (s)	8.2	8.1	8.0	7.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	72	62	24	34	0	0	0	0	21	221	72
Future Volume (vph)	0	72	62	24	34	0	0	0	0	21	221	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	78	67	26	37	0	0	0	0	23	240	78

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	145	63	341
Volume Left (vph)	0	26	23
Volume Right (vph)	67	0	78
Hadj (s)	-0.24	0.12	-0.09
Departure Headway (s)	4.5	5.0	4.3
Degree Utilization, x	0.18	0.09	0.41
Capacity (veh/h)	734	662	805
Control Delay (s)	8.6	8.5	10.3
Approach Delay (s)	8.6	8.5	10.3
Approach LOS	A	A	B

Intersection Summary			
Delay	9.6		
Level of Service	A		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	79	10	0	0	20	10	53	140	9	0	0	0
Future Volume (vph)	79	10	0	0	20	10	53	140	9	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	86	11	0	0	22	11	58	152	10	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	97	33	220
Volume Left (vph)	86	0	58
Volume Right (vph)	0	11	10
Hadj (s)	0.21	-0.17	0.06
Departure Headway (s)	4.7	4.4	4.3
Degree Utilization, x	0.13	0.04	0.26
Capacity (veh/h)	727	769	817
Control Delay (s)	8.3	7.5	8.8
Approach Delay (s)	8.3	7.5	8.8
Approach LOS	A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		

NEAR TERM PM PEAK HOUR (WITH DIVERSION) + 5-YEAR AOF SP
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	869	7	25	1146	49	14	3	9	9	0	16
Future Volume (Veh/h)	42	869	7	25	1146	49	14	3	9	9	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	945	8	27	1246	53	15	3	10	10	0	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.71						0.71	0.71		0.71	0.71	0.71
vC, conflicting volume	1299			953			1735	2394	476	1902	2372	650
vC1, stage 1 conf vol							1041	1041		1326	1326	
vC2, stage 2 conf vol							694	1353		576	1045	
vCu, unblocked vol	601			953			1216	2145	476	1452	2114	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	93			96			93	98	98	96	100	98
cM capacity (veh/h)	689			717			217	187	535	236	195	769

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	46	630	323	27	831	468	28	27
Volume Left	46	0	0	27	0	0	15	10
Volume Right	0	0	8	0	0	53	10	17
cSH	689	1700	1700	717	1700	1700	270	419
Volume to Capacity	0.07	0.37	0.19	0.04	0.49	0.28	0.10	0.06
Queue Length 95th (ft)	5	0	0	3	0	0	9	5
Control Delay (s)	10.6	0.0	0.0	10.2	0.0	0.0	19.9	14.2
Lane LOS	B			B			C	B
Approach Delay (s)	0.5			0.2			19.9	14.2
Approach LOS							C	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 13.3 SEC = LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	725	80	113	951	92	125	37	103	148	33	160
Future Volume (veh/h)	86	725	80	113	951	92	125	37	103	148	33	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	93	788	87	123	1034	100	136	40	112	161	36	174
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1140	126	155	1222	118	169	436	371	197	442	396
Arrive On Green	0.07	0.35	0.35	0.09	0.37	0.37	0.10	0.23	0.23	0.11	0.25	0.25
Sat Flow, veh/h	1774	3215	355	1774	3261	315	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	93	434	441	123	561	573	136	40	112	161	36	174
Grp Sat Flow(s),veh/h/ln	1774	1770	1800	1774	1770	1807	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	4.4	17.7	17.7	5.7	24.5	24.5	6.3	1.4	4.9	7.5	1.3	7.8
Cycle Q Clear(g_c), s	4.4	17.7	17.7	5.7	24.5	24.5	6.3	1.4	4.9	7.5	1.3	7.8
Prop In Lane	1.00		0.20	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	627	638	155	663	677	169	436	371	197	442	396
V/C Ratio(X)	0.78	0.69	0.69	0.80	0.85	0.85	0.80	0.09	0.30	0.82	0.08	0.44
Avail Cap(c_a), veh/h	162	645	656	202	685	700	221	436	371	254	442	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	23.3	23.3	37.8	24.2	24.2	37.4	25.3	26.6	36.7	24.3	26.7
Incr Delay (d2), s/veh	15.6	3.1	3.0	15.2	9.4	9.3	14.8	0.4	2.1	14.8	0.4	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.2	9.4	3.5	13.6	14.0	3.8	0.8	2.4	4.5	0.7	3.8
LnGrp Delay(d),s/veh	54.4	26.4	26.3	53.0	33.6	33.5	52.2	25.7	28.7	51.5	24.6	30.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		968			1257			288			371	
Approach Delay, s/veh		29.0			35.4			39.4			38.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	24.3	11.9	34.4	12.6	25.6	10.2	36.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.1	19.5	9.6	30.8	10.5	21.1	7.7	32.7
Max Q Clear Time (g_c+I1), s	9.5	6.9	7.7	19.7	8.3	9.8	6.4	26.5
Green Ext Time (p_c), s	0.1	1.5	0.0	8.5	0.1	1.4	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	880	113	118	1068	0	0	0	0	135	0	87
Future Volume (veh/h)	0	880	113	118	1068	0	0	0	0	135	0	87
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	957	123	128	1161	0				147	0	95
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1511	194	289	2440	0				383	0	342
Arrive On Green	0.00	0.48	0.48	0.16	0.69	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3248	405	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	537	543	128	1161	0				147	0	95
Grp Sat Flow(s),veh/h/ln	0	1770	1791	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	21.5	21.6	6.2	14.4	0.0				6.7	0.0	4.8
Cycle Q Clear(g_c), s	0.0	21.5	21.6	6.2	14.4	0.0				6.7	0.0	4.8
Prop In Lane	0.00		0.23	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	848	858	289	2440	0				383	0	342
V/C Ratio(X)	0.00	0.63	0.63	0.44	0.48	0.00				0.38	0.00	0.28
Avail Cap(c_a), veh/h	0	848	858	289	2440	0				383	0	342
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.65	0.65	0.45	0.45	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.5	18.5	35.9	6.8	0.0				31.9	0.0	31.1
Incr Delay (d2), s/veh	0.0	2.3	2.3	0.5	0.1	0.0				2.9	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.0	11.1	3.1	7.0	0.0				3.6	0.0	2.3
LnGrp Delay(d),s/veh	0.0	20.8	20.8	36.3	6.9	0.0				34.8	0.0	33.1
LnGrp LOS		C	C	D	A					C		C
Approach Vol, veh/h		1080			1289						242	
Approach Delay, s/veh		20.8			9.8						34.1	
Approach LOS		C			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			20.0	50.0		25.0		70.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			15.5	45.5		20.5		65.5
Max Q Clear Time (g_c+I1), s			8.2	23.6		8.7		16.4
Green Ext Time (p_c), s			4.6	7.7		0.8		12.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	884	0	0	1100	197	99	0	285	0	0	0
Future Volume (veh/h)	125	884	0	0	1100	197	99	0	285	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	136	961	0	0	1196	214	108	0	310			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	322	2440	0	0	1384	246	383	0	342			
Arrive On Green	0.36	1.00	0.00	0.00	0.46	0.46	0.22	0.00	0.22			
Sat Flow, veh/h	1774	3632	0	0	3097	534	1774	0	1583			
Grp Volume(v), veh/h	136	961	0	0	702	708	108	0	310			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1768	1774	0	1583			
Q Serve(g_s), s	5.5	0.0	0.0	0.0	33.7	34.2	4.8	0.0	18.1			
Cycle Q Clear(g_c), s	5.5	0.0	0.0	0.0	33.7	34.2	4.8	0.0	18.1			
Prop In Lane	1.00		0.00	0.00		0.30	1.00		1.00			
Lane Grp Cap(c), veh/h	322	2440	0	0	815	815	383	0	342			
V/C Ratio(X)	0.42	0.39	0.00	0.00	0.86	0.87	0.28	0.00	0.91			
Avail Cap(c_a), veh/h	322	2440	0	0	903	903	383	0	342			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.72	0.72	0.00	0.00	0.25	0.25	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.5	0.0	0.0	0.0	22.9	23.0	31.1	0.0	36.3			
Incr Delay (d2), s/veh	0.6	0.3	0.0	0.0	2.1	2.3	1.8	0.0	30.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	0.1	0.0	0.0	16.8	17.1	2.6	0.0	10.8			
LnGrp Delay(d),s/veh	27.2	0.3	0.0	0.0	25.0	25.4	32.9	0.0	66.3			
LnGrp LOS	C	A			C	C	C		E			
Approach Vol, veh/h		1097			1410			418				
Approach Delay, s/veh		3.7			25.2			57.7				
Approach LOS		A			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		70.0			21.7	48.3
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		20.5		65.5			12.5	48.5
Max Q Clear Time (g_c+I1), s		20.1		2.0			7.5	36.2
Green Ext Time (p_c), s		0.1		9.6			2.9	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	864	72	16	955	122	192	46	21	132	19	140
Future Volume (veh/h)	123	864	72	16	955	122	192	46	21	132	19	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	134	939	78	17	1038	133	209	50	23	143	21	152
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	1250	104	93	1072	137	338	230	106	336	37	268
Arrive On Green	0.18	0.76	0.76	0.05	0.34	0.34	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1774	3309	275	1774	3157	404	1774	1209	556	1774	196	1417
Grp Volume(v), veh/h	134	502	515	17	581	590	209	0	73	143	0	173
Grp Sat Flow(s),veh/h/ln	1774	1770	1814	1774	1770	1791	1774	0	1765	1774	0	1613
Q Serve(g_s), s	6.9	15.2	15.2	0.9	30.7	30.8	10.3	0.0	3.3	6.8	0.0	9.3
Cycle Q Clear(g_c), s	6.9	15.2	15.2	0.9	30.7	30.8	10.3	0.0	3.3	6.8	0.0	9.3
Prop In Lane	1.00		0.15	1.00		0.23	1.00		0.32	1.00		0.88
Lane Grp Cap(c), veh/h	162	669	686	93	601	608	338	0	336	336	0	306
V/C Ratio(X)	0.83	0.75	0.75	0.18	0.97	0.97	0.62	0.00	0.22	0.43	0.00	0.57
Avail Cap(c_a), veh/h	164	669	686	93	601	608	338	0	336	336	0	306
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	9.1	9.1	43.0	30.9	30.9	35.3	0.0	32.5	33.9	0.0	35.0
Incr Delay (d2), s/veh	25.6	6.8	6.6	0.9	28.7	28.9	8.2	0.0	1.5	3.9	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.4	8.6	0.4	19.8	20.1	5.8	0.0	1.8	3.7	0.0	4.8
LnGrp Delay(d),s/veh	63.8	15.9	15.7	44.0	59.6	59.8	43.5	0.0	33.9	37.8	0.0	42.4
LnGrp LOS	E	B	B	D	E	E	D		C	D		D
Approach Vol, veh/h		1151			1188			282			316	
Approach Delay, s/veh		21.4			59.5			41.0			40.3	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	22.6	9.5	40.4	22.6	22.5	13.2	36.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.0	18.1	5.0	35.9	18.1	18.0	8.8	32.1
Max Q Clear Time (g_c+I1), s	8.8	5.3	2.9	17.2	12.3	11.3	8.9	32.8
Green Ext Time (p_c), s	0.2	0.8	0.1	6.6	0.5	0.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

GP BUILDOUT PM PEAK HOUR
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	290	40	60	270	0	30	0	90	0	310	130
Future Volume (vph)	0	290	40	60	270	0	30	0	90	0	310	130
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	290	40	60	270	0	30	0	90	0	310	130

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	330	60	270	120	440
Volume Left (vph)	0	60	0	30	0
Volume Right (vph)	40	0	0	90	130
Hadj (s)	-0.04	0.53	0.03	-0.37	-0.14
Departure Headway (s)	6.6	7.6	7.1	6.8	6.2
Degree Utilization, x	0.60	0.13	0.53	0.23	0.75
Capacity (veh/h)	512	439	468	441	440
Control Delay (s)	19.1	10.5	16.6	11.8	25.5
Approach Delay (s)	19.1	15.5		11.8	25.5
Approach LOS	C	C		B	D

Intersection Summary			
Delay	19.7		
Level of Service	C		
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	20	465	20	0	0	0	0	300	290	20
Future Volume (Veh/h)	0	20	20	465	20	0	0	0	0	300	290	20
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	20	20	465	20	0	0	0	0	300	290	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1150				
pX, platoon unblocked												
vC, conflicting volume	910	900	300	920	910	0	310			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	910	900	300	920	910	0	310			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	91	97	0	91	100	100			82		
cM capacity (veh/h)	205	227	740	196	224	1085	1250			1623		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	40	485	300	310
Volume Left	0	465	300	0
Volume Right	20	0	0	20
cSH	347	197	1623	1700
Volume to Capacity	0.12	2.46	0.18	0.18
Queue Length 95th (ft)	10	1012	17	0
Control Delay (s)	16.7	709.5	7.7	0.0
Lane LOS	C	F	A	
Approach Delay (s)	16.7	709.5	3.8	
Approach LOS	C	F		

Intersection Summary			
Average Delay	305.8		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	295	0	0	390	100	95	25	625	0	0	0
Future Volume (Veh/h)	15	295	0	0	390	100	95	25	625	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	295	0	0	390	100	95	25	625	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)								1156				
pX, platoon unblocked												
vC, conflicting volume	822	840	0	675	528	338	0			650		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	822	840	0	675	528	338	0			650		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	71	0	100	0	9	86	94			100		
cM capacity (veh/h)	51	284	1085	0	429	705	1623			936		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	310	490	745
Volume Left	15	0	95
Volume Right	0	100	625
cSH	233	467	1623
Volume to Capacity	1.33	1.05	0.06
Queue Length 95th (ft)	416	378	5
Control Delay (s)	216.8	85.5	1.5
Lane LOS	F	F	A
Approach Delay (s)	216.8	85.5	1.5
Approach LOS	F	F	

Intersection Summary			
Average Delay	71.4		
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	720	200	100	490	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	720	200	100	490	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	720	200	100	490	0	0	0	0	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	490			920			1510	1510	820	1510	1610	490
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	490			920			1510	1510	820	1510	1610	490
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			87			100	100	100	100	100	100
cM capacity (veh/h)	1073			742			89	104	375	89	90	578

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	920	590	0
Volume Left	0	100	0
Volume Right	200	0	0
cSH	1700	742	1700
Volume to Capacity	0.54	0.13	0.00
Queue Length 95th (ft)	0	12	0
Control Delay (s)	0.0	3.5	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.5	0.0
Approach LOS			A

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	360	0	0	510	200	80	0	150	0	0	0
Future Volume (Veh/h)	360	360	0	0	510	200	80	0	150	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	360	360	0	0	510	200	80	0	150	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	710			360			1690	1790	360	1840	1690	610
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	710			360			1690	1790	360	1840	1690	610
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	60			100			0	100	78	100	100	100
cM capacity (veh/h)	889			1199			51	48	684	31	56	494

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	720	710	230
Volume Left	360	0	80
Volume Right	0	200	150
cSH	889	1700	128
Volume to Capacity	0.40	0.42	1.80
Queue Length 95th (ft)	50	0	442
Control Delay (s)	8.9	0.0	448.7
Lane LOS	A		F
Approach Delay (s)	8.9	0.0	448.7
Approach LOS			F

Intersection Summary			
Average Delay	66.0		
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	100	65	345	40	70	10	440	95	50	10	105	200
Future Volume (vph)	100	65	345	40	70	10	440	95	50	10	105	200
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	100	65	345	40	70	10	440	95	50	10	105	200

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	510	120	585	315
Volume Left (vph)	100	40	440	10
Volume Right (vph)	345	10	50	200
Hadj (s)	-0.33	0.05	0.13	-0.34
Departure Headway (s)	6.8	8.6	7.3	7.3
Degree Utilization, x	0.96	0.29	1.00	0.64
Capacity (veh/h)	510	392	585	475
Control Delay (s)	56.4	15.0	67.7	22.3
Approach Delay (s)	56.4	15.0	67.7	22.3
Approach LOS	F	C	F	C

Intersection Summary			
Delay	50.4		
Level of Service	F		
Intersection Capacity Utilization	95.2%	ICU Level of Service	F
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	185	10	15	105	15	30	60	30	20	40	40
Future Volume (vph)	20	185	10	15	105	15	30	60	30	20	40	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	185	10	15	105	15	30	60	30	20	40	40

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	215	135	120	100
Volume Left (vph)	20	15	30	20
Volume Right (vph)	10	15	30	40
Hadj (s)	0.02	-0.01	-0.07	-0.17
Departure Headway (s)	4.6	4.7	4.8	4.7
Degree Utilization, x	0.28	0.18	0.16	0.13
Capacity (veh/h)	730	716	692	694
Control Delay (s)	9.4	8.7	8.7	8.5
Approach Delay (s)	9.4	8.7	8.7	8.5
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	30.8%	ICU Level of Service	A
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	115	120	105	85	0	0	0	0	95	525	50
Future Volume (Veh/h)	0	115	120	105	85	0	0	0	0	95	525	50
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	115	120	105	85	0	0	0	0	95	525	50
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								540				
pX, platoon unblocked												
vC, conflicting volume	782	740	550	918	765	0	575			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	782	740	550	918	765	0	575			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	65	78	23	73	100	100			94		
cM capacity (veh/h)	236	324	535	136	314	1085	998			1623		

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	235	190	670
Volume Left	0	105	95
Volume Right	120	0	50
cSH	406	182	1623
Volume to Capacity	0.58	1.04	0.06
Queue Length 95th (ft)	88	224	5
Control Delay (s)	25.4	131.3	1.6
Lane LOS	D	F	A
Approach Delay (s)	25.4	131.3	1.6
Approach LOS	D	F	

Intersection Summary			
Average Delay	29.2		
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	90	0	0	80	40	190	525	85	0	0	0
Future Volume (Veh/h)	120	90	0	0	80	40	190	525	85	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	120	90	0	0	80	40	190	525	85	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)								546				
pX, platoon unblocked												
vC, conflicting volume	1028	990	0	992	948	568	0			610		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1028	990	0	992	948	568	0			610		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	9	59	100	100	65	92	88			100		
cM capacity (veh/h)	131	218	1085	139	230	523	1623			969		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	210	120	800
Volume Left	120	0	190
Volume Right	0	40	85
cSH	158	283	1623
Volume to Capacity	1.33	0.42	0.12
Queue Length 95th (ft)	317	50	10
Control Delay (s)	239.4	26.7	2.8
Lane LOS	F	D	A
Approach Delay (s)	239.4	26.7	2.8
Approach LOS	F	D	

Intersection Summary			
Average Delay	49.3		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1260	15	30	1190	60	20	5	15	15	5	25
Future Volume (Veh/h)	60	1260	15	30	1190	60	20	5	15	15	5	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	60	1260	15	30	1190	60	20	5	15	15	5	25
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.66						0.66	0.66		0.66	0.66	0.66
vC, conflicting volume	1250			1275			2070	2698	638	2048	2675	625
vC1, stage 1 conf vol							1388	1388		1280	1280	
vC2, stage 2 conf vol							682	1310		768	1395	
vCu, unblocked vol	350			1275			1592	2542	638	1558	2508	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			94			85	97	96	93	96	97
cM capacity (veh/h)	796			540			133	154	420	222	142	716

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	60	840	435	30	793	457	40	45
Volume Left	60	0	0	30	0	0	20	15
Volume Right	0	0	15	0	0	60	15	25
cSH	796	1700	1700	540	1700	1700	183	327
Volume to Capacity	0.08	0.49	0.26	0.06	0.47	0.27	0.22	0.14
Queue Length 95th (ft)	6	0	0	4	0	0	20	12
Control Delay (s)	9.9	0.0	0.0	12.1	0.0	0.0	30.1	17.8
Lane LOS	A			B			D	C
Approach Delay (s)	0.4			0.3			30.1	17.8
Approach LOS							D	C

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 16.9 SEC = LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	940	50	100	920	370	110	40	70	220	40	250
Future Volume (veh/h)	300	940	50	100	920	370	110	40	70	220	40	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	300	940	50	100	920	370	110	40	70	220	40	250
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	1680	89	124	936	374	135	298	364	245	393	352
Arrive On Green	0.18	0.49	0.49	0.07	0.38	0.38	0.08	0.16	0.16	0.14	0.22	0.22
Sat Flow, veh/h	1774	3418	182	1774	2471	987	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	300	487	503	100	657	633	110	40	70	220	40	250
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1689	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	21.3	24.7	24.7	7.1	47.0	47.8	7.8	2.4	4.6	15.6	2.3	18.7
Cycle Q Clear(g_c), s	21.3	24.7	24.7	7.1	47.0	47.8	7.8	2.4	4.6	15.6	2.3	18.7
Prop In Lane	1.00		0.10	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	324	870	900	124	670	639	135	298	364	245	393	352
V/C Ratio(X)	0.92	0.56	0.56	0.81	0.98	0.99	0.82	0.13	0.19	0.90	0.10	0.71
Avail Cap(c_a), veh/h	339	870	900	206	670	639	216	298	364	256	393	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	22.8	22.8	58.7	39.3	39.6	58.3	46.2	39.7	54.3	39.7	46.0
Incr Delay (d2), s/veh	29.7	0.8	0.8	11.6	29.8	33.1	11.9	0.9	1.2	30.4	0.5	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	12.2	12.6	3.9	28.5	28.0	4.3	1.3	2.1	9.8	1.2	9.3
LnGrp Delay(d),s/veh	81.2	23.6	23.6	70.3	69.1	72.6	70.2	47.1	40.9	84.7	40.2	57.6
LnGrp LOS	F	C	C	E	E	E	E	D	D	F	D	E
Approach Vol, veh/h		1290			1390			220			510	
Approach Delay, s/veh		37.0			70.8			56.7			67.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	25.0	13.5	67.5	14.2	32.9	27.9	53.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.5	20.5	14.9	58.1	15.6	23.4	24.5	48.5
Max Q Clear Time (g_c+I1), s	17.6	6.6	9.1	26.7	9.8	20.7	23.3	49.8
Green Ext Time (p_c), s	0.1	1.9	0.1	21.1	0.1	0.6	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1210	150	390	1390	0	0	0	0	200	0	50
Future Volume (veh/h)	0	1210	150	390	1390	0	0	0	0	200	0	50
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	1210	150	390	1390	0				200	0	50
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1536	190	421	2693	0				285	0	255
Arrive On Green	0.00	0.48	0.48	0.24	0.76	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3264	392	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	673	687	390	1390	0				200	0	50
Grp Sat Flow(s),veh/h/ln	0	1770	1794	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	36.4	36.8	24.7	17.8	0.0				12.3	0.0	3.1
Cycle Q Clear(g_c), s	0.0	36.4	36.8	24.7	17.8	0.0				12.3	0.0	3.1
Prop In Lane	0.00		0.22	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	857	869	421	2693	0				285	0	255
V/C Ratio(X)	0.00	0.79	0.79	0.93	0.52	0.00				0.70	0.00	0.20
Avail Cap(c_a), veh/h	0	857	869	486	2693	0				285	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.74	0.74	0.26	0.26	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.7	24.8	42.9	5.4	0.0				45.6	0.0	41.8
Incr Delay (d2), s/veh	0.0	5.4	5.5	7.8	0.0	0.0				13.4	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.1	19.4	13.0	8.5	0.0				7.1	0.0	1.5
LnGrp Delay(d),s/veh	0.0	30.1	30.2	50.7	5.5	0.0				59.1	0.0	43.5
LnGrp LOS		C	C	D	A					E		D
Approach Vol, veh/h		1360			1780						250	
Approach Delay, s/veh		30.1			15.4						56.0	
Approach LOS		C			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			31.8	60.2		23.0		92.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			31.5	51.5		18.5		87.5
Max Q Clear Time (g_c+I1), s			26.7	38.8		14.3		19.8
Green Ext Time (p_c), s			0.6	11.5		0.5		45.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1280	0	0	1400	230	380	0	230	0	0	0
Future Volume (veh/h)	130	1280	0	0	1400	230	380	0	230	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	130	1280	0	0	1400	230	380	0	230			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	210	2317	0	0	1516	246	474	0	423			
Arrive On Green	0.16	0.87	0.00	0.00	0.50	0.50	0.27	0.00	0.27			
Sat Flow, veh/h	1774	3632	0	0	3143	495	1774	0	1583			
Grp Volume(v), veh/h	130	1280	0	0	805	825	380	0	230			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1775	1774	0	1583			
Q Serve(g_s), s	7.9	10.3	0.0	0.0	48.3	50.2	23.0	0.0	14.3			
Cycle Q Clear(g_c), s	7.9	10.3	0.0	0.0	48.3	50.2	23.0	0.0	14.3			
Prop In Lane	1.00		0.00	0.00		0.28	1.00		1.00			
Lane Grp Cap(c), veh/h	210	2317	0	0	879	882	474	0	423			
V/C Ratio(X)	0.62	0.55	0.00	0.00	0.92	0.94	0.80	0.00	0.54			
Avail Cap(c_a), veh/h	210	2317	0	0	900	903	474	0	423			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.46	0.46	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.0	3.2	0.0	0.0	26.7	27.2	39.3	0.0	36.1			
Incr Delay (d2), s/veh	2.5	0.4	0.0	0.0	1.6	2.1	13.4	0.0	5.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	5.0	0.0	0.0	23.9	25.0	13.1	0.0	6.8			
LnGrp Delay(d),s/veh	48.5	3.7	0.0	0.0	28.3	29.3	52.7	0.0	41.1			
LnGrp LOS	D	A			C	C	D		D			
Approach Vol, veh/h		1410			1630			610				
Approach Delay, s/veh		7.8			28.8			48.3				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		35.2		79.8			18.1	61.7
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		30.7		75.3			12.3	58.5
Max Q Clear Time (g_c+I1), s		25.0		12.3			9.9	52.2
Green Ext Time (p_c), s		1.6		15.1			1.9	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	990	130	60	1050	170	370	50	90	290	200	210
Future Volume (veh/h)	390	990	130	60	1050	170	370	50	90	290	200	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	390	990	130	60	1050	170	370	50	90	290	200	210
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1322	173	103	836	135	332	101	181	349	149	156
Arrive On Green	0.41	0.84	0.84	0.06	0.27	0.27	0.19	0.17	0.17	0.20	0.18	0.18
Sat Flow, veh/h	1774	3147	413	1774	3052	493	1774	597	1075	1774	833	875
Grp Volume(v), veh/h	390	557	563	60	608	612	370	0	140	290	0	410
Grp Sat Flow(s),veh/h/ln	1774	1770	1790	1774	1770	1776	1774	0	1673	1774	0	1708
Q Serve(g_s), s	23.5	15.6	15.6	3.8	31.5	31.5	21.5	0.0	8.7	18.1	0.0	20.5
Cycle Q Clear(g_c), s	23.5	15.6	15.6	3.8	31.5	31.5	21.5	0.0	8.7	18.1	0.0	20.5
Prop In Lane	1.00		0.23	1.00		0.28	1.00		0.64	1.00		0.51
Lane Grp Cap(c), veh/h	363	743	752	103	485	486	332	0	282	349	0	305
V/C Ratio(X)	1.08	0.75	0.75	0.58	1.25	1.26	1.12	0.00	0.50	0.83	0.00	1.35
Avail Cap(c_a), veh/h	363	743	752	103	485	486	332	0	282	349	0	305
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	6.6	6.6	52.8	41.8	41.8	46.8	0.0	43.4	44.4	0.0	47.3
Incr Delay (d2), s/veh	64.7	5.7	5.6	7.9	130.5	132.1	84.3	0.0	6.1	20.2	0.0	176.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.9	8.1	8.2	2.1	32.9	33.2	18.3	0.0	4.5	10.8	0.0	24.5
LnGrp Delay(d),s/veh	98.7	12.3	12.2	60.7	172.3	173.8	131.1	0.0	49.5	64.5	0.0	223.4
LnGrp LOS	F	B	B	E	F	F	F		D	E		F
Approach Vol, veh/h		1510			1280			510			700	
Approach Delay, s/veh		34.6			167.8			108.7			157.6	
Approach LOS		C			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.1	23.9	11.2	52.8	26.0	25.0	28.0	36.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.6	19.4	6.7	48.3	21.5	20.5	23.5	31.5
Max Q Clear Time (g_c+I1), s	20.1	10.7	5.8	17.6	23.5	22.5	25.5	33.5
Green Ext Time (p_c), s	0.7	0.4	0.2	9.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	108.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	20	465	20	0	0	0	0	300	290	20
Future Volume (veh/h)	0	20	20	465	20	0	0	0	0	300	290	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1863	1863	1900
Adj Flow Rate, veh/h	0	20	20	465	20	0				300	290	20
Adj No. of Lanes	0	1	0	0	1	0				1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	353	353	644	23	0				776	754	52
Arrive On Green	0.00	0.41	0.41	0.41	0.41	0.00				0.44	0.44	0.44
Sat Flow, veh/h	0	856	856	1275	55	0				1774	1723	119
Grp Volume(v), veh/h	0	0	40	485	0	0				300	0	310
Grp Sat Flow(s),veh/h/ln	0	0	1712	1330	0	0				1774	0	1842
Q Serve(g_s), s	0.0	0.0	0.8	19.6	0.0	0.0				6.9	0.0	6.8
Cycle Q Clear(g_c), s	0.0	0.0	0.8	20.5	0.0	0.0				6.9	0.0	6.8
Prop In Lane	0.00		0.50	0.96		0.00				1.00		0.06
Lane Grp Cap(c), veh/h	0	0	706	666	0	0				776	0	806
V/C Ratio(X)	0.00	0.00	0.06	0.73	0.00	0.00				0.39	0.00	0.38
Avail Cap(c_a), veh/h	0	0	899	821	0	0				776	0	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.56	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	10.6	16.8	0.0	0.0				11.4	0.0	11.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4	0.0	0.0				1.5	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	7.7	0.0	0.0				3.6	0.0	3.8
LnGrp Delay(d),s/veh	0.0	0.0	10.6	18.2	0.0	0.0				12.9	0.0	12.8
LnGrp LOS			B	B						B		B
Approach Vol, veh/h		40			485						610	
Approach Delay, s/veh		10.6			18.2						12.8	
Approach LOS		B			B						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				29.3		30.7		29.3
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				31.5		19.5		31.5
Max Q Clear Time (g_c+I1), s				2.8		8.9		22.5
Green Ext Time (p_c), s				3.7		2.1		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	295	0	0	390	100	95	25	625	0	0	0
Future Volume (veh/h)	15	295	0	0	390	100	95	25	625	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	15	295	0	0	390	100	95	25	625			
Adj No. of Lanes	0	1	0	0	1	0	0	1	0			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	92	558	0	0	492	126	94	25	617			
Arrive On Green	0.34	0.34	0.00	0.00	0.34	0.34	0.46	0.46	0.46			
Sat Flow, veh/h	25	1621	0	0	1431	367	206	54	1354			
Grp Volume(v), veh/h	310	0	0	0	0	490	745	0	0			
Grp Sat Flow(s),veh/h/ln	1646	0	0	0	0	1798	1614	0	0			
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	11.1	20.5	0.0	0.0			
Cycle Q Clear(g_c), s	11.4	0.0	0.0	0.0	0.0	11.1	20.5	0.0	0.0			
Prop In Lane	0.05		0.00	0.00		0.20	0.13		0.84			
Lane Grp Cap(c), veh/h	650	0	0	0	0	619	736	0	0			
V/C Ratio(X)	0.48	0.00	0.00	0.00	0.00	0.79	1.01	0.00	0.00			
Avail Cap(c_a), veh/h	749	0	0	0	0	719	736	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.93	0.00	0.00	0.00	0.00	1.00	0.64	0.00	0.00			
Uniform Delay (d), s/veh	11.6	0.0	0.0	0.0	0.0	13.3	12.2	0.0	0.0			
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	5.2	29.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	0.0	0.0	6.3	15.1	0.0	0.0			
LnGrp Delay(d),s/veh	12.2	0.0	0.0	0.0	0.0	18.6	42.1	0.0	0.0			
LnGrp LOS	B					B	F					
Approach Vol, veh/h		310			490			745				
Approach Delay, s/veh		12.2			18.6			42.1				
Approach LOS		B			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		25.0		20.0				20.0
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		18.0		18.0				18.0
Max Q Clear Time (g_c+I1), s		22.5		13.4				13.1
Green Ext Time (p_c), s		0.0		2.1				2.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	65	345	40	70	10	440	95	50	10	105	200
Future Volume (veh/h)	100	65	345	40	70	10	440	95	50	10	105	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	100	65	345	40	70	10	440	95	50	10	105	200
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	85	337	175	276	34	580	102	54	73	320	572
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	242	267	1064	294	870	106	892	193	101	17	604	1081
Grp Volume(v), veh/h	510	0	0	120	0	0	585	0	0	315	0	0
Grp Sat Flow(s),veh/h/ln	1574	0	0	1270	0	0	1186	0	0	1702	0	0
Q Serve(g_s), s	14.7	0.0	0.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.5	0.0	0.0	2.8	0.0	0.0	26.7	0.0	0.0	6.4	0.0	0.0
Prop In Lane	0.20		0.68	0.33		0.08	0.75		0.09	0.03		0.63
Lane Grp Cap(c), veh/h	572	0	0	485	0	0	736	0	0	964	0	0
V/C Ratio(X)	0.89	0.00	0.00	0.25	0.00	0.00	0.80	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	572	0	0	485	0	0	768	0	0	1009	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	14.6	0.0	0.0	12.8	0.0	0.0	8.0	0.0	0.0
Incr Delay (d2), s/veh	16.1	0.0	0.0	0.3	0.0	0.0	5.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	0.0	1.4	0.0	0.0	9.8	0.0	0.0	2.9	0.0	0.0
LnGrp Delay(d),s/veh	36.2	0.0	0.0	14.8	0.0	0.0	18.4	0.0	0.0	8.2	0.0	0.0
LnGrp LOS	D			B			B			A		
Approach Vol, veh/h		510			120			585			315	
Approach Delay, s/veh		36.2			14.8			18.4			8.2	
Approach LOS		D			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.4		23.0		35.4		23.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		32.5		18.5		32.5		18.5
Max Q Clear Time (g_c+I1), s		28.7		20.5		8.4		4.8
Green Ext Time (p_c), s		2.2		0.0		7.6		3.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	115	120	105	85	0	0	0	0	95	525	50
Future Volume (veh/h)	0	115	120	105	85	0	0	0	0	95	525	50
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	115	120	105	85	0				95	525	50
Adj No. of Lanes	0	1	0	0	1	0				0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	221	231	214	145	0				148	818	78
Arrive On Green	0.00	0.26	0.26	0.26	0.26	0.00				0.57	0.57	0.57
Sat Flow, veh/h	0	836	873	424	550	0				259	1431	136
Grp Volume(v), veh/h	0	0	235	190	0	0				670	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1709	974	0	0				1826	0	0
Q Serve(g_s), s	0.0	0.0	6.5	5.0	0.0	0.0				13.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.5	11.4	0.0	0.0				13.6	0.0	0.0
Prop In Lane	0.00		0.51	0.55		0.00				0.14		0.07
Lane Grp Cap(c), veh/h	0	0	452	359	0	0				1044	0	0
V/C Ratio(X)	0.00	0.00	0.52	0.53	0.00	0.00				0.64	0.00	0.00
Avail Cap(c_a), veh/h	0	0	569	454	0	0				1044	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.97	0.00	0.00				0.91	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	17.3	19.8	0.0	0.0				8.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	1.2	0.0	0.0				2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.1	2.8	0.0	0.0				7.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	18.2	21.0	0.0	0.0				10.7	0.0	0.0
LnGrp LOS			B	C						B		
Approach Vol, veh/h		235			190						670	
Approach Delay, s/veh		18.2			21.0						10.7	
Approach LOS		B			C						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				19.0		36.0		19.0
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				18.3		27.7		18.3
Max Q Clear Time (g_c+I1), s				8.5		15.6		13.4
Green Ext Time (p_c), s				1.9		3.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	90	0	0	80	40	190	525	85	0	0	0
Future Volume (veh/h)	120	90	0	0	80	40	190	525	85	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	120	90	0	0	80	40	190	525	85			
Adj No. of Lanes	0	1	0	0	1	0	0	1	0			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	225	141	0	0	250	125	273	755	122			
Arrive On Green	0.21	0.21	0.00	0.00	0.21	0.21	0.64	0.64	0.64			
Sat Flow, veh/h	613	661	0	0	1173	586	429	1186	192			
Grp Volume(v), veh/h	210	0	0	0	0	120	800	0	0			
Grp Sat Flow(s),veh/h/ln	1274	0	0	0	0	1759	1807	0	0			
Q Serve(g_s), s	6.4	0.0	0.0	0.0	0.0	3.5	17.3	0.0	0.0			
Cycle Q Clear(g_c), s	9.9	0.0	0.0	0.0	0.0	3.5	17.3	0.0	0.0			
Prop In Lane	0.57		0.00	0.00		0.33	0.24		0.11			
Lane Grp Cap(c), veh/h	366	0	0	0	0	376	1150	0	0			
V/C Ratio(X)	0.57	0.00	0.00	0.00	0.00	0.32	0.70	0.00	0.00			
Avail Cap(c_a), veh/h	501	0	0	0	0	537	1150	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.87	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	22.8	0.0	0.0	0.0	0.0	19.9	7.1	0.0	0.0			
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.0	0.0	0.5	3.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	0.0	0.0	1.7	9.6	0.0	0.0			
LnGrp Delay(d),s/veh	24.1	0.0	0.0	0.0	0.0	20.4	10.6	0.0	0.0			
LnGrp LOS	C					C	B					
Approach Vol, veh/h		210			120			800				
Approach Delay, s/veh		24.1			20.4			10.6				
Approach LOS		C			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		42.7		17.3				17.3
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		32.7		18.3				18.3
Max Q Clear Time (g_c+I1), s		19.3		11.9				5.5
Green Ext Time (p_c), s		5.0		1.0				1.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	940	50	100	920	370	110	40	70	220	40	250
Future Volume (veh/h)	300	940	50	100	920	370	110	40	70	220	40	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	300	940	50	100	920	370	110	40	70	220	40	250
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	1313	70	127	963	647	140	387	442	242	470	421
Arrive On Green	0.18	0.38	0.38	0.07	0.27	0.27	0.08	0.21	0.21	0.14	0.27	0.27
Sat Flow, veh/h	1774	3418	182	1774	3539	1583	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	300	487	503	100	920	370	110	40	70	220	40	250
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1583	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	15.0	21.0	21.0	5.0	23.0	16.2	5.5	1.6	3.0	11.0	1.5	12.4
Cycle Q Clear(g_c), s	15.0	21.0	21.0	5.0	23.0	16.2	5.5	1.6	3.0	11.0	1.5	12.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	679	703	127	963	647	140	387	442	242	470	421
V/C Ratio(X)	0.92	0.72	0.72	0.79	0.95	0.57	0.79	0.10	0.16	0.91	0.09	0.59
Avail Cap(c_a), veh/h	325	679	703	168	963	647	239	387	442	242	470	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	23.6	23.6	41.1	32.2	20.5	40.7	28.9	24.4	38.3	24.8	28.8
Incr Delay (d2), s/veh	30.7	3.6	3.5	16.5	19.0	1.2	9.4	0.5	0.8	34.2	0.4	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	11.0	11.3	3.0	13.8	7.2	3.1	0.9	1.4	7.7	0.8	6.1
LnGrp Delay(d),s/veh	66.9	27.2	27.0	57.6	51.2	21.7	50.1	29.4	25.2	72.5	25.2	34.9
LnGrp LOS	E	C	C	E	D	C	D	C	C	E	C	C
Approach Vol, veh/h		1290			1390			220			510	
Approach Delay, s/veh		36.3			43.8			38.4			50.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	23.2	10.9	39.1	11.6	28.4	21.0	29.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.3	18.7	8.5	32.5	12.1	18.9	16.5	24.5
Max Q Clear Time (g_c+I1), s	13.0	5.0	7.0	23.0	7.5	14.4	17.0	25.0
Green Ext Time (p_c), s	0.0	1.9	0.0	7.8	0.1	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

12: State Route 246 & U.S. Highway 101 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1210	150	390	1390	0	0	0	0	200	0	50
Future Volume (veh/h)	0	1210	150	390	1390	0	0	0	0	200	0	50
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	1210	150	390	1390	0				200	0	50
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1536	190	421	2693	0				285	0	255
Arrive On Green	0.00	0.48	0.48	0.24	0.76	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3264	392	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	673	687	390	1390	0				200	0	50
Grp Sat Flow(s),veh/h/ln	0	1770	1794	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	36.4	36.8	24.7	17.8	0.0				12.3	0.0	3.1
Cycle Q Clear(g_c), s	0.0	36.4	36.8	24.7	17.8	0.0				12.3	0.0	3.1
Prop In Lane	0.00		0.22	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	857	869	421	2693	0				285	0	255
V/C Ratio(X)	0.00	0.79	0.79	0.93	0.52	0.00				0.70	0.00	0.20
Avail Cap(c_a), veh/h	0	857	869	486	2693	0				285	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.62	0.26	0.26	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.7	24.8	42.9	5.4	0.0				45.6	0.0	41.8
Incr Delay (d2), s/veh	0.0	4.6	4.6	7.8	0.0	0.0				13.4	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.9	19.2	13.0	8.5	0.0				7.1	0.0	1.5
LnGrp Delay(d),s/veh	0.0	29.2	29.4	50.7	5.5	0.0				59.1	0.0	43.5
LnGrp LOS		C	C	D	A					E		D
Approach Vol, veh/h		1360			1780						250	
Approach Delay, s/veh		29.3			15.4						56.0	
Approach LOS		C			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			31.8	60.2		23.0		92.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			31.5	51.5		18.5		87.5
Max Q Clear Time (g_c+I1), s			26.7	38.8		14.3		19.8
Green Ext Time (p_c), s			0.6	11.5		0.5		45.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

13: U.S. Highway 101 NB Ramps & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1280	0	0	1400	230	380	0	230	0	0	0
Future Volume (veh/h)	130	1280	0	0	1400	230	380	0	230	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	130	1280	0	0	1400	230	380	0	230			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	210	2317	0	0	1516	246	474	0	423			
Arrive On Green	0.16	0.87	0.00	0.00	0.50	0.50	0.27	0.00	0.27			
Sat Flow, veh/h	1774	3632	0	0	3143	495	1774	0	1583			
Grp Volume(v), veh/h	130	1280	0	0	805	825	380	0	230			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1775	1774	0	1583			
Q Serve(g_s), s	7.9	10.3	0.0	0.0	48.3	50.2	23.0	0.0	14.3			
Cycle Q Clear(g_c), s	7.9	10.3	0.0	0.0	48.3	50.2	23.0	0.0	14.3			
Prop In Lane	1.00		0.00	0.00		0.28	1.00		1.00			
Lane Grp Cap(c), veh/h	210	2317	0	0	879	882	474	0	423			
V/C Ratio(X)	0.62	0.55	0.00	0.00	0.92	0.94	0.80	0.00	0.54			
Avail Cap(c_a), veh/h	210	2317	0	0	900	903	474	0	423			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.46	0.46	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.0	3.2	0.0	0.0	26.7	27.2	39.3	0.0	36.1			
Incr Delay (d2), s/veh	2.5	0.4	0.0	0.0	1.6	2.1	13.4	0.0	5.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	5.0	0.0	0.0	23.9	25.0	13.1	0.0	6.8			
LnGrp Delay(d),s/veh	48.5	3.7	0.0	0.0	28.3	29.3	52.7	0.0	41.1			
LnGrp LOS	D	A			C	C	D		D			
Approach Vol, veh/h		1410			1630			610				
Approach Delay, s/veh		7.8			28.8			48.3				
Approach LOS		A			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		35.2		79.8			18.1	61.7
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		30.7		75.3			12.3	58.5
Max Q Clear Time (g_c+I1), s		25.0		12.3			9.9	52.2
Green Ext Time (p_c), s		1.6		15.1			1.9	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	990	130	60	1050	170	370	50	90	290	200	210
Future Volume (veh/h)	390	990	130	60	1050	170	370	50	90	290	200	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	390	990	130	60	1050	170	370	50	90	290	200	210
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1322	173	103	836	135	332	101	181	349	149	156
Arrive On Green	0.41	0.84	0.84	0.06	0.27	0.27	0.19	0.17	0.17	0.20	0.18	0.18
Sat Flow, veh/h	1774	3147	413	1774	3052	493	1774	597	1075	1774	833	875
Grp Volume(v), veh/h	390	557	563	60	608	612	370	0	140	290	0	410
Grp Sat Flow(s),veh/h/ln	1774	1770	1790	1774	1770	1776	1774	0	1673	1774	0	1708
Q Serve(g_s), s	23.5	15.6	15.6	3.8	31.5	31.5	21.5	0.0	8.7	18.1	0.0	20.5
Cycle Q Clear(g_c), s	23.5	15.6	15.6	3.8	31.5	31.5	21.5	0.0	8.7	18.1	0.0	20.5
Prop In Lane	1.00		0.23	1.00		0.28	1.00		0.64	1.00		0.51
Lane Grp Cap(c), veh/h	363	743	752	103	485	486	332	0	282	349	0	305
V/C Ratio(X)	1.08	0.75	0.75	0.58	1.25	1.26	1.12	0.00	0.50	0.83	0.00	1.35
Avail Cap(c_a), veh/h	363	743	752	103	485	486	332	0	282	349	0	305
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.00	0.96
Uniform Delay (d), s/veh	34.0	6.6	6.6	52.8	41.8	41.8	46.8	0.0	43.4	44.4	0.0	47.3
Incr Delay (d2), s/veh	64.7	5.7	5.6	7.9	130.5	132.1	84.3	0.0	6.1	19.5	0.0	175.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.9	8.1	8.2	2.1	32.9	33.2	18.3	0.0	4.5	10.7	0.0	24.5
LnGrp Delay(d),s/veh	98.7	12.3	12.2	60.7	172.3	173.8	131.1	0.0	49.5	63.9	0.0	222.7
LnGrp LOS	F	B	B	E	F	F	F		D	E		F
Approach Vol, veh/h		1510			1280			510			700	
Approach Delay, s/veh		34.6			167.8			108.7			156.9	
Approach LOS		C			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.1	23.9	11.2	52.8	26.0	25.0	28.0	36.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.6	19.4	6.7	48.3	21.5	20.5	23.5	31.5
Max Q Clear Time (g_c+I1), s	20.1	10.7	5.8	17.6	23.5	22.5	25.5	33.5
Green Ext Time (p_c), s	0.7	0.4	0.2	9.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	108.1
HCM 2010 LOS	F

GP BUILDOUT PM PEAK HOUR + AOF SP
1: Central/US 101 SB Off-Ramp & Jonata/AOF

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	290	40	60	270	0	30	0	90	0	254	150
Future Volume (vph)	0	290	40	60	270	0	30	0	90	0	254	150
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	290	40	60	270	0	30	0	90	0	254	150

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	330	60	270	120	404
Volume Left (vph)	0	60	0	30	0
Volume Right (vph)	40	0	0	90	150
Hadj (s)	-0.04	0.53	0.03	-0.37	-0.19
Departure Headway (s)	6.4	7.4	6.9	6.6	6.0
Degree Utilization, x	0.59	0.12	0.52	0.22	0.68
Capacity (veh/h)	520	452	482	437	564
Control Delay (s)	18.0	10.2	15.8	11.5	20.9
Approach Delay (s)	18.0	14.8		11.5	20.9
Approach LOS	C	B		B	C

Intersection Summary			
Delay	17.4		
Level of Service	C		
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
2: AOF Southbound & DWY/Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	20	20	438	20	0	0	0	0	300	234	20
Future Volume (vph)	0	20	20	438	20	0	0	0	0	300	234	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	20	20	438	20	0	0	0	0	300	234	20

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	40	458	554
Volume Left (vph)	0	438	300
Volume Right (vph)	20	0	20
Hadj (s)	-0.27	0.23	0.12
Departure Headway (s)	6.2	5.9	5.5
Degree Utilization, x	0.07	0.75	0.85
Capacity (veh/h)	537	593	638
Control Delay (s)	9.6	24.2	32.3
Approach Delay (s)	9.6	24.2	32.3
Approach LOS	A	C	D

Intersection Summary			
Delay	27.9		
Level of Service	D		
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
3: AOF Northbound & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	15	295	0	0	354	100	104	25	691	0	0	0
Future Volume (vph)	15	295	0	0	354	100	104	25	691	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	295	0	0	354	100	104	25	691	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	310	454	820
Volume Left (vph)	15	0	104
Volume Right (vph)	0	100	691
Hadj (s)	0.04	-0.10	-0.45
Departure Headway (s)	6.8	6.4	5.8
Degree Utilization, x	0.59	0.81	1.00
Capacity (veh/h)	512	549	820
Control Delay (s)	18.9	30.7	60.0
Approach Delay (s)	18.9	30.7	60.0
Approach LOS	C	D	F

Intersection Summary			
Delay	43.6		
Level of Service	E		
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
4: US 101 SB On-Ramp & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	726	200	100	454	0	0	0	0	0	0	0
Future Volume (Veh/h)	0	726	200	100	454	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	726	200	100	454	0	0	0	0	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	454			926			1480	1480	826	1480	1580	454
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	454			926			1480	1480	826	1480	1580	454
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			86			100	100	100	100	100	100
cM capacity (veh/h)	1107			738			93	108	372	93	94	606

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	926	554	0
Volume Left	0	100	0
Volume Right	200	0	0
cSH	1700	738	1700
Volume to Capacity	0.54	0.14	0.00
Queue Length 95th (ft)	0	12	0
Control Delay (s)	0.0	3.5	0.0
Lane LOS		A	A
Approach Delay (s)	0.0	3.5	0.0
Approach LOS			A

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
5: US 101 NB Ramps & Damassa

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	352	0	0	462	200	92	0	150	0	0	0
Future Volume (Veh/h)	374	352	0	0	462	200	92	0	150	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	374	352	0	0	462	200	92	0	150	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	662			352			1662	1762	352	1812	1662	562
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	662			352			1662	1762	352	1812	1662	562
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	60			100			0	100	78	100	100	100
cM capacity (veh/h)	927			1207			53	50	692	33	58	526

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	726	662	242
Volume Left	374	0	92
Volume Right	0	200	150
cSH	927	1700	124
Volume to Capacity	0.40	0.39	1.95
Queue Length 95th (ft)	49	0	486
Control Delay (s)	8.8	0.0	515.9
Lane LOS	A		F
Approach Delay (s)	8.8	0.0	515.9
Approach LOS			F

Intersection Summary			
Average Delay	80.5		
Intersection Capacity Utilization	100.0%	ICU Level of Service	G
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
6: McMurray Road & Damassa/Driveway

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	80	65	357	40	70	10	432	115	50	10	145	160
Future Volume (vph)	80	65	357	40	70	10	432	115	50	10	145	160
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	80	65	357	40	70	10	432	115	50	10	145	160

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	502	120	597	315
Volume Left (vph)	80	40	432	10
Volume Right (vph)	357	10	50	160
Hadj (s)	-0.36	0.05	0.13	-0.26
Departure Headway (s)	6.8	8.6	7.3	7.3
Degree Utilization, x	0.94	0.29	1.00	0.64
Capacity (veh/h)	502	391	597	471
Control Delay (s)	52.4	14.9	67.5	22.5
Approach Delay (s)	52.4	14.9	67.5	22.5
Approach LOS	F	B	F	C

Intersection Summary			
Delay	49.2		
Level of Service	E		
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
7: Central & Second

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	197	10	15	117	15	30	60	30	20	50	50
Future Volume (vph)	20	197	10	15	117	15	30	60	30	20	50	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	197	10	15	117	15	30	60	30	20	50	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	227	147	120	120
Volume Left (vph)	20	15	30	20
Volume Right (vph)	10	15	30	50
Hadj (s)	0.03	-0.01	-0.07	-0.18
Departure Headway (s)	4.7	4.8	4.9	4.8
Degree Utilization, x	0.30	0.20	0.16	0.16
Capacity (veh/h)	717	701	672	682
Control Delay (s)	9.7	9.0	8.9	8.7
Approach Delay (s)	9.7	9.0	8.9	8.7
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	32.5%	ICU Level of Service	A
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
8: Second & AOF Southbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	121	126	105	85	0	0	0	0	107	451	32
Future Volume (vph)	0	121	126	105	85	0	0	0	0	107	451	32
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	121	126	105	85	0	0	0	0	107	451	32

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	247	190	590
Volume Left (vph)	0	105	107
Volume Right (vph)	126	0	32
Hadj (s)	-0.27	0.14	0.04
Departure Headway (s)	5.7	6.2	5.2
Degree Utilization, x	0.39	0.33	0.86
Capacity (veh/h)	597	547	678
Control Delay (s)	12.3	12.2	31.1
Approach Delay (s)	12.3	12.2	31.1
Approach LOS	B	B	D

Intersection Summary			
Delay	23.1		
Level of Service	C		
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
9: Second & AOF Northbound

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	126	90	0	0	80	40	196	513	85	0	0	0
Future Volume (vph)	126	90	0	0	80	40	196	513	85	0	0	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	126	90	0	0	80	40	196	513	85	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	216	120	794
Volume Left (vph)	126	0	196
Volume Right (vph)	0	40	85
Hadj (s)	0.15	-0.17	0.02
Departure Headway (s)	6.2	6.1	5.0
Degree Utilization, x	0.37	0.20	1.00
Capacity (veh/h)	575	578	794
Control Delay (s)	12.7	10.6	55.3
Approach Delay (s)	12.7	10.6	55.3
Approach LOS	B	B	F

Intersection Summary			
Delay	42.4		
Level of Service	E		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

GP BUILDOUT PM PEAK HOUR + AOF SP
10: Central & State Route 246

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1266	15	30	1206	60	20	5	15	15	5	25
Future Volume (Veh/h)	60	1266	15	30	1206	60	20	5	15	15	5	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	60	1266	15	30	1206	60	20	5	15	15	5	25
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)					418							
pX, platoon unblocked	0.65						0.65	0.65		0.65	0.65	0.65
vC, conflicting volume	1266			1281			2084	2720	640	2066	2697	633
vC1, stage 1 conf vol							1394	1394		1296	1296	
vC2, stage 2 conf vol							690	1326		770	1401	
vCu, unblocked vol	342			1281			1596	2570	640	1569	2536	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			94			85	97	96	93	96	96
cM capacity (veh/h)	792			538			131	153	418	220	141	707

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	60	844	437	30	804	462	40	45
Volume Left	60	0	0	30	0	0	20	15
Volume Right	0	0	15	0	0	60	15	25
cSH	792	1700	1700	538	1700	1700	181	324
Volume to Capacity	0.08	0.50	0.26	0.06	0.47	0.27	0.22	0.14
Queue Length 95th (ft)	6	0	0	4	0	0	20	12
Control Delay (s)	9.9	0.0	0.0	12.1	0.0	0.0	30.4	17.9
Lane LOS	A			B			D	C
Approach Delay (s)	0.4			0.3			30.4	17.9
Approach LOS							D	C

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		

AWD = 17.0 sec = LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	960	56	132	1120	394	116	33	92	256	35	352
Future Volume (veh/h)	292	960	56	132	1120	394	116	33	92	256	35	352
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	960	56	132	1120	394	116	33	92	256	35	352
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	1588	93	159	1023	353	142	291	389	254	388	347
Arrive On Green	0.16	0.47	0.47	0.09	0.40	0.40	0.08	0.16	0.16	0.14	0.22	0.22
Sat Flow, veh/h	1774	3399	198	1774	2583	892	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	292	500	516	132	761	753	116	33	92	256	35	352
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1705	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	20.1	26.2	26.2	9.1	49.5	49.5	8.0	1.9	5.8	17.9	2.0	27.4
Cycle Q Clear(g_c), s	20.1	26.2	26.2	9.1	49.5	49.5	8.0	1.9	5.8	17.9	2.0	27.4
Prop In Lane	1.00		0.11	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	827	854	159	701	675	142	291	389	254	388	347
V/C Ratio(X)	1.02	0.60	0.60	0.83	1.09	1.12	0.82	0.11	0.24	1.01	0.09	1.01
Avail Cap(c_a), veh/h	285	827	854	248	701	675	223	291	389	254	388	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	24.7	24.7	56.0	37.8	37.8	56.6	45.3	37.8	53.6	38.9	48.8
Incr Delay (d2), s/veh	59.5	1.3	1.2	12.7	59.7	70.7	12.4	0.8	1.4	58.4	0.5	51.8
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
%ile BackOfQ(50%),veh/ln	14.5	13.1	13.5	5.0	35.8	36.5	4.5	1.0	2.7	12.9	1.0	17.0
LnGrp Delay(d),s/veh	112.0	26.0	25.9	68.7	97.4	108.5	69.0	46.1	39.2	112.0	39.3	100.6
LnGrp LOS	F	C	C	E	F	F	E	D	D	F	D	F
Approach Vol, veh/h		1308			1646			241			643	
Approach Delay, s/veh		45.2			100.2			54.5			101.8	
Approach LOS		D			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.4	24.0	15.7	62.9	14.5	31.9	24.6	54.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.9	19.5	17.5	52.1	15.7	21.7	20.1	49.5
Max Q Clear Time (g_c+I1), s	19.9	7.8	11.1	28.2	10.0	29.4	22.1	51.5
Green Ext Time (p_c), s	0.0	2.4	0.2	19.1	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	78.8
HCM 2010 LOS	E

12: State Route 246 & U.S. Highway 101 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1261	177	390	1480	0	0	0	0	200	0	116
Future Volume (veh/h)	0	1261	177	390	1480	0	0	0	0	200	0	116
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	1261	177	390	1480	0				200	0	116
Adj No. of Lanes	0	2	0	1	2	0				0	1	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1574	220	419	2749	0				268	0	239
Arrive On Green	0.00	0.50	0.50	0.24	0.78	0.00				0.15	0.00	0.15
Sat Flow, veh/h	0	3213	436	1774	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	712	726	390	1480	0				200	0	116
Grp Sat Flow(s),veh/h/ln	0	1770	1786	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	41.7	42.4	26.9	20.1	0.0				13.5	0.0	8.4
Cycle Q Clear(g_c), s	0.0	41.7	42.4	26.9	20.1	0.0				13.5	0.0	8.4
Prop In Lane	0.00		0.24	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	893	901	419	2749	0				268	0	239
V/C Ratio(X)	0.00	0.80	0.81	0.93	0.54	0.00				0.75	0.00	0.48
Avail Cap(c_a), veh/h	0	893	901	490	2749	0				268	0	239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.67	0.67	0.29	0.29	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.7	25.9	46.7	5.4	0.0				50.8	0.0	48.6
Incr Delay (d2), s/veh	0.0	5.0	5.2	8.7	0.1	0.0				17.1	0.0	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.6	22.1	14.2	9.7	0.0				7.9	0.0	4.1
LnGrp Delay(d),s/veh	0.0	30.7	31.1	55.4	5.4	0.0				67.9	0.0	55.5
LnGrp LOS		C	C	E	A					E		E
Approach Vol, veh/h		1438			1870						316	
Approach Delay, s/veh		30.9			15.8						63.3	
Approach LOS		C			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			34.0	67.6		23.4		101.6
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			34.5	58.1		18.9		97.1
Max Q Clear Time (g_c+I1), s			28.9	44.4		15.5		22.1
Green Ext Time (p_c), s			0.6	12.6		0.5		53.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	1315	0	0	1475	230	395	0	230	0	0	0
Future Volume (veh/h)	146	1315	0	0	1475	230	395	0	230	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	146	1315	0	0	1475	230	395	0	230			
Adj No. of Lanes	1	2	0	0	2	0	0	1	1			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	207	2393	0	0	1611	247	447	0	399			
Arrive On Green	0.23	1.00	0.00	0.00	0.52	0.52	0.25	0.00	0.25			
Sat Flow, veh/h	1774	3632	0	0	3169	473	1774	0	1583			
Grp Volume(v), veh/h	146	1315	0	0	839	866	395	0	230			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1779	1774	0	1583			
Q Serve(g_s), s	9.4	0.0	0.0	0.0	53.7	56.4	26.8	0.0	15.9			
Cycle Q Clear(g_c), s	9.4	0.0	0.0	0.0	53.7	56.4	26.8	0.0	15.9			
Prop In Lane	1.00		0.00	0.00		0.27	1.00		1.00			
Lane Grp Cap(c), veh/h	207	2393	0	0	927	932	447	0	399			
V/C Ratio(X)	0.71	0.55	0.00	0.00	0.91	0.93	0.88	0.00	0.58			
Avail Cap(c_a), veh/h	207	2393	0	0	956	961	447	0	399			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.44	0.44	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	46.0	0.0	0.0	0.0	27.0	27.6	45.0	0.0	40.9			
Incr Delay (d2), s/veh	4.8	0.4	0.0	0.0	1.3	1.8	21.6	0.0	6.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.9	0.1	0.0	0.0	26.4	28.1	15.7	0.0	7.6			
LnGrp Delay(d),s/veh	50.8	0.4	0.0	0.0	28.3	29.5	66.6	0.0	46.9			
LnGrp LOS	D	A			C	C	E		D			
Approach Vol, veh/h		1461			1705			625				
Approach Delay, s/veh		5.4			28.9			59.3				
Approach LOS		A			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		36.0		89.0			19.1	69.9
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		31.5		84.5			12.5	67.5
Max Q Clear Time (g_c+I1), s		28.8		2.0			11.4	58.4
Green Ext Time (p_c), s		0.9		16.4			0.9	7.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1005	130	60	1065	170	370	50	90	290	200	270
Future Volume (veh/h)	410	1005	130	60	1065	170	370	50	90	290	200	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	410	1005	130	60	1065	170	370	50	90	290	200	270
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	1309	169	101	844	135	319	108	194	360	147	198
Arrive On Green	0.26	0.55	0.55	0.06	0.28	0.28	0.18	0.18	0.18	0.20	0.20	0.20
Sat Flow, veh/h	1774	3153	408	1774	3059	487	1774	597	1075	1774	720	972
Grp Volume(v), veh/h	410	564	571	60	615	620	370	0	140	290	0	470
Grp Sat Flow(s),veh/h/ln	1774	1770	1791	1774	1770	1777	1774	0	1673	1774	0	1691
Q Serve(g_s), s	24.5	30.9	31.0	4.1	34.5	34.5	22.5	0.0	9.4	19.5	0.0	25.5
Cycle Q Clear(g_c), s	24.5	30.9	31.0	4.1	34.5	34.5	22.5	0.0	9.4	19.5	0.0	25.5
Prop In Lane	1.00		0.23	1.00		0.27	1.00		0.64	1.00		0.57
Lane Grp Cap(c), veh/h	348	735	744	101	488	490	319	0	302	360	0	345
V/C Ratio(X)	1.18	0.77	0.77	0.60	1.26	1.26	1.16	0.00	0.46	0.80	0.00	1.36
Avail Cap(c_a), veh/h	348	735	744	101	488	490	319	0	302	360	0	345
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	23.3	23.3	57.5	45.3	45.3	51.3	0.0	45.8	47.4	0.0	49.8
Incr Delay (d2), s/veh	102.6	6.3	6.2	9.2	132.6	134.3	100.6	0.0	5.0	17.2	0.0	180.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.9	16.3	16.5	2.3	34.8	35.2	19.9	0.0	4.7	11.2	0.0	29.2
LnGrp Delay(d),s/veh	148.9	29.6	29.5	66.7	177.8	179.5	151.9	0.0	50.8	64.6	0.0	230.5
LnGrp LOS	F	C	C	E	F	F	F		D	E		F
Approach Vol, veh/h		1545			1295			510			760	
Approach Delay, s/veh		61.2			173.5			124.1			167.2	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.9	27.1	11.6	56.4	27.0	30.0	29.0	39.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	25.4	22.6	7.1	51.9	22.5	25.5	24.5	34.5
Max Q Clear Time (g_c+I1), s	21.5	11.4	6.1	33.0	24.5	27.5	26.5	36.5
Green Ext Time (p_c), s	0.9	0.5	0.2	7.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	124.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	20	438	20	0	0	0	0	300	234	20
Future Volume (veh/h)	0	20	20	438	20	0	0	0	0	300	234	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	20	20	438	20	0				300	234	20
Adj No. of Lanes	0	1	0	0	1	0				0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	329	329	605	22	0				454	354	30
Arrive On Green	0.00	0.38	0.38	0.38	0.38	0.00				0.47	0.47	0.47
Sat Flow, veh/h	0	856	856	1267	58	0				976	761	65
Grp Volume(v), veh/h	0	0	40	458	0	0				554	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1712	1325	0	0				1802	0	0
Q Serve(g_s), s	0.0	0.0	0.9	18.8	0.0	0.0				14.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.9	19.7	0.0	0.0				14.2	0.0	0.0
Prop In Lane	0.00		0.50	0.96		0.00				0.54		0.04
Lane Grp Cap(c), veh/h	0	0	659	628	0	0				838	0	0
V/C Ratio(X)	0.00	0.00	0.06	0.73	0.00	0.00				0.66	0.00	0.00
Avail Cap(c_a), veh/h	0	0	762	710	0	0				838	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.54	0.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.6	17.8	0.0	0.0				12.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	0.0	0.0				4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	7.4	0.0	0.0				7.9	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	11.7	19.7	0.0	0.0				16.5	0.0	0.0
LnGrp LOS			B	B						B		
Approach Vol, veh/h		40			458						554	
Approach Delay, s/veh		11.7			19.7						16.5	
Approach LOS		B			B						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				27.6		32.4		27.6
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				26.7		24.3		26.7
Max Q Clear Time (g_c+I1), s				2.9		16.2		21.7
Green Ext Time (p_c), s				3.3		2.3		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	295	0	0	354	100	104	25	691	0	0	0
Future Volume (veh/h)	15	295	0	0	354	100	104	25	691	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	15	295	0	0	354	100	104	25	691			
Adj No. of Lanes	0	1	0	0	1	0	0	1	0			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	83	501	0	0	444	125	103	25	683			
Arrive On Green	0.32	0.32	0.00	0.00	0.32	0.32	0.50	0.50	0.50			
Sat Flow, veh/h	23	1577	0	0	1398	395	205	49	1359			
Grp Volume(v), veh/h	310	0	0	0	0	454	820	0	0			
Grp Sat Flow(s),veh/h/ln	1600	0	0	0	0	1793	1613	0	0			
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	11.6	25.1	0.0	0.0			
Cycle Q Clear(g_c), s	12.0	0.0	0.0	0.0	0.0	11.6	25.1	0.0	0.0			
Prop In Lane	0.05		0.00	0.00		0.22	0.13		0.84			
Lane Grp Cap(c), veh/h	584	0	0	0	0	570	810	0	0			
V/C Ratio(X)	0.53	0.00	0.00	0.00	0.00	0.80	1.01	0.00	0.00			
Avail Cap(c_a), veh/h	670	0	0	0	0	656	810	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	0.64	0.00	0.00			
Uniform Delay (d), s/veh	14.0	0.0	0.0	0.0	0.0	15.6	12.4	0.0	0.0			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	6.0	28.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	0.0	0.0	6.6	17.4	0.0	0.0			
LnGrp Delay(d),s/veh	14.8	0.0	0.0	0.0	0.0	21.6	40.9	0.0	0.0			
LnGrp LOS	B					C	F					
Approach Vol, veh/h		310			454			820				
Approach Delay, s/veh		14.8			21.6			40.9				
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		29.6		20.4				20.4
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		22.7		18.3				18.3
Max Q Clear Time (g_c+I1), s		27.1		14.0				13.6
Green Ext Time (p_c), s		0.0		1.9				2.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	65	357	40	70	10	432	115	50	10	145	160
Future Volume (veh/h)	80	65	357	40	70	10	432	115	50	10	145	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	80	65	357	40	70	10	432	115	50	10	145	160
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	83	346	166	260	32	578	127	55	70	453	477
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	188	270	1127	283	848	103	873	232	101	17	831	875
Grp Volume(v), veh/h	502	0	0	120	0	0	597	0	0	315	0	0
Grp Sat Flow(s),veh/h/ln	1585	0	0	1234	0	0	1206	0	0	1723	0	0
Q Serve(g_s), s	14.1	0.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.7	0.0	0.0	3.0	0.0	0.0	27.1	0.0	0.0	6.3	0.0	0.0
Prop In Lane	0.16		0.71	0.33		0.08	0.72		0.08	0.03		0.51
Lane Grp Cap(c), veh/h	555	0	0	458	0	0	759	0	0	1000	0	0
V/C Ratio(X)	0.90	0.00	0.00	0.26	0.00	0.00	0.79	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	555	0	0	458	0	0	840	0	0	1113	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.3	0.0	0.0	15.7	0.0	0.0	12.4	0.0	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	18.3	0.0	0.0	0.3	0.0	0.0	4.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	0.0	1.5	0.0	0.0	9.7	0.0	0.0	2.9	0.0	0.0
LnGrp Delay(d),s/veh	39.6	0.0	0.0	16.0	0.0	0.0	17.0	0.0	0.0	7.9	0.0	0.0
LnGrp LOS	D			B			B			A		
Approach Vol, veh/h		502			120			597			315	
Approach Delay, s/veh		39.6			16.0			17.0			7.9	
Approach LOS		D			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.7		23.2		37.7		23.2
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		37.3		18.7		37.3		18.7
Max Q Clear Time (g_c+I1), s		29.1		20.7		8.3		5.0
Green Ext Time (p_c), s		4.1		0.0		8.2		3.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	121	126	105	85	0	0	0	0	107	451	32
Future Volume (veh/h)	0	121	126	105	85	0	0	0	0	107	451	32
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	121	126	105	85	0				107	451	32
Adj No. of Lanes	0	1	0	0	1	0				0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	230	239	227	153	0				181	763	54
Arrive On Green	0.00	0.27	0.27	0.27	0.27	0.00				0.55	0.55	0.55
Sat Flow, veh/h	0	837	872	419	558	0				332	1398	99
Grp Volume(v), veh/h	0	0	247	190	0	0				590	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1709	977	0	0				1829	0	0
Q Serve(g_s), s	0.0	0.0	6.1	4.3	0.0	0.0				10.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.1	10.4	0.0	0.0				10.8	0.0	0.0
Prop In Lane	0.00		0.51	0.55		0.00				0.18		0.05
Lane Grp Cap(c), veh/h	0	0	469	380	0	0				998	0	0
V/C Ratio(X)	0.00	0.00	0.53	0.50	0.00	0.00				0.59	0.00	0.00
Avail Cap(c_a), veh/h	0	0	619	500	0	0				998	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.97	0.00	0.00				0.67	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	15.4	17.4	0.0	0.0				7.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	1.0	0.0	0.0				1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.0	2.5	0.0	0.0				5.9	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	16.3	18.4	0.0	0.0				9.4	0.0	0.0
LnGrp LOS			B	B						A		
Approach Vol, veh/h		247			190						590	
Approach Delay, s/veh		16.3			18.4						9.4	
Approach LOS		B			B						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				18.2		31.8		18.2
Change Period (Y+Rc), s				4.5		4.5		4.5
Max Green Setting (Gmax), s				18.1		22.9		18.1
Max Q Clear Time (g_c+I1), s				8.1		12.8		12.4
Green Ext Time (p_c), s				2.0		2.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	90	0	0	80	40	196	513	85	0	0	0
Future Volume (veh/h)	126	90	0	0	80	40	196	513	85	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	126	90	0	0	80	40	196	513	85			
Adj No. of Lanes	0	1	0	0	1	0	0	1	0			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	233	140	0	0	256	128	281	737	122			
Arrive On Green	0.22	0.22	0.00	0.00	0.22	0.22	0.63	0.63	0.63			
Sat Flow, veh/h	630	638	0	0	1173	586	446	1167	193			
Grp Volume(v), veh/h	216	0	0	0	0	120	794	0	0			
Grp Sat Flow(s),veh/h/ln	1268	0	0	0	0	1759	1806	0	0			
Q Serve(g_s), s	6.7	0.0	0.0	0.0	0.0	3.4	17.4	0.0	0.0			
Cycle Q Clear(g_c), s	10.2	0.0	0.0	0.0	0.0	3.4	17.4	0.0	0.0			
Prop In Lane	0.58		0.00	0.00		0.33	0.25		0.11			
Lane Grp Cap(c), veh/h	372	0	0	0	0	385	1140	0	0			
V/C Ratio(X)	0.58	0.00	0.00	0.00	0.00	0.31	0.70	0.00	0.00			
Avail Cap(c_a), veh/h	498	0	0	0	0	537	1140	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.87	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	22.7	0.0	0.0	0.0	0.0	19.7	7.3	0.0	0.0			
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.0	0.0	0.5	3.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.0	0.0	1.7	9.5	0.0	0.0			
LnGrp Delay(d),s/veh	24.0	0.0	0.0	0.0	0.0	20.1	10.8	0.0	0.0			
LnGrp LOS	C					C	B					
Approach Vol, veh/h		216			120			794				
Approach Delay, s/veh		24.0			20.1			10.8				
Approach LOS		C			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		42.4		17.6				17.6
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		32.7		18.3				18.3
Max Q Clear Time (g_c+I1), s		19.4		12.2				5.4
Green Ext Time (p_c), s		4.9		1.0				1.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	960	56	132	1120	394	116	33	92	256	35	352
Future Volume (veh/h)	292	960	56	132	1120	394	116	33	92	256	35	352
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	960	56	132	1120	394	116	33	92	256	35	352
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	1328	77	162	1115	732	145	356	447	261	453	406
Arrive On Green	0.17	0.39	0.39	0.09	0.31	0.31	0.08	0.19	0.19	0.15	0.26	0.26
Sat Flow, veh/h	1774	3399	198	1774	3539	1583	1774	1863	1583	1774	1770	1583
Grp Volume(v), veh/h	292	500	516	132	1120	394	116	33	92	256	35	352
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1583	1774	1863	1583	1774	1770	1583
Q Serve(g_s), s	16.4	24.0	24.0	7.3	31.5	17.8	6.4	1.5	4.4	14.4	1.5	21.3
Cycle Q Clear(g_c), s	16.4	24.0	24.0	7.3	31.5	17.8	6.4	1.5	4.4	14.4	1.5	21.3
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	692	714	162	1115	732	145	356	447	261	453	406
V/C Ratio(X)	0.99	0.72	0.72	0.82	1.00	0.54	0.80	0.09	0.21	0.98	0.08	0.87
Avail Cap(c_a), veh/h	296	692	714	197	1115	732	232	356	447	261	453	406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	25.9	25.9	44.6	34.3	19.3	45.1	33.3	27.4	42.5	28.2	35.6
Incr Delay (d2), s/veh	48.2	3.7	3.6	19.3	28.1	0.8	9.6	0.5	1.0	50.4	0.3	21.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	12.4	12.8	4.5	19.7	7.9	3.5	0.8	2.1	10.7	0.8	11.7
LnGrp Delay(d),s/veh	89.7	29.6	29.5	63.9	62.3	20.1	54.7	33.8	28.4	93.0	28.6	57.0
LnGrp LOS	F	C	C	E	F	C	D	C	C	F	C	E
Approach Vol, veh/h		1308			1646			241			643	
Approach Delay, s/veh		43.0			52.3			41.8			69.8	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	23.6	13.6	43.6	12.7	30.1	21.2	36.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.7	19.1	11.1	37.1	13.1	20.7	16.7	31.5
Max Q Clear Time (g_c+I1), s	16.4	6.4	9.3	26.0	8.4	23.3	18.4	33.5
Green Ext Time (p_c), s	0.0	2.5	0.1	9.5	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.4
HCM 2010 LOS	D