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HARVEST MOON AGRICULTURAL EMPLOYEE HOUSING PROJECT (QUATTRIN RANCH) TRAFFIC IMPACT ANALYSIS

DRAFT REPORT

MONTEREY COUNTY, CALIFORNIA

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PREFACE

This report was originally completed November 11, 2019. There has since been a change in the California Environmental Quality Act (CEQA) regarding determination of transportation impacts as well as a reduction in the size of the Project Apartment Alternative. These two changes are discussed below.

1. Change in California Environmental Quality Act (CEQA) Transportation Impact Criteria

In accordance with California Senate Bill 743, transportation impacts are now being determined by Vehicle Miles Traveled (VMT) rather than level of service (LOS). This change occurred subsequent to the preparation of this traffic study in November 2019. Section 12 of this study provides an analysis of VMT for CEQA purposes. The County of Monterey and City of Salinas have not adopted methodologies or thresholds of significance at this time. However, the determination of impacts can be made based on the estimates included herein.

Impacts identified in this report based on LOS are no longer CEQA impacts. However, analysis does identify locations where traffic operations will not conform to City of Salinas, County of Monterey or Caltrans policies. The need for project contribution toward improvements in traffic operations recommended in this report are therefore now determined by these agencies without needing to consider whether the improvements or lack thereof would result in full mitigation of anticipated impacts.

2. Change in Description of Project Apartment Alternative

The following traffic study is based on a preliminary project description that included two project alternatives. The first was a 1,200-bed agricultural employee (H2A) housing facility. The second was 200 standard apartments. Subsequent to the preparation of the study, the apartment alternative was reduced to 150 standard apartments.

The analysis of the 1,200-bed H2A housing facility continues to reflect the current proposal. The analysis of the 200-unit apartment alternative overstates the trip generation and resulting impacts at the study intersections. The locations where the 200-unit Apartment alternative were expected to result in traffic operations below acceptable levels in County, City or Caltrans policies will not change for the 150-unit Apartment alternative. This is because the locations are already operating worse than acceptable levels or are expected to in the future without the project, the Apartment alternative would add traffic above the historic significance threshold and Transportation Demand Management (TDM) measures alone would not eliminate the impact.

1 INTRODUCTION

The proposed Quattrin Ranch project would be located in the Boronda Area of Monterey County, California. The project site covers approximately 7 acres on the west side of North Davis Road at West Rossi Street. The project has two possible alternatives:

1. 1,200 beds for agricultural employee housing; OR
2. 200 standard apartments.

Both alternatives are analyzed in this report.

The locations of the Project site and study area are indicated in **Exhibit 1**. The project site plan is shown in **Exhibit 2**.

This report summarizes the analysis of potential traffic impacts associated with both alternatives of the proposed Project as well as cumulative impacts. Existing, Background and Cumulative conditions are also analyzed with and without the Project. Vehicular, pedestrian, bicycle and transit circulation are evaluated at the Project site and the immediate surrounding street network.

1.1 Scope of Work

This report addresses the following topics:

1. Existing vehicular, pedestrian and bicycle circulation on the surrounding street network.
2. Assessment of potential impacts to vehicular, pedestrian, bicycle and transit circulation due to the Project, and recommendations to minimize or alleviate those impacts.
3. Assessment of potential background and cumulative traffic impacts.
4. Site access and on-site circulation assessment.
5. Estimation of the project's Vehicle Miles Traveled (VMT).

1.2 Study Network

The AM and PM peak periods were analyzed at the following six intersections, which includes the agency having jurisdiction. Their locations are indicated on **Exhibit 1**.

1. Intersection 1 – Adams Street / West Laurel Drive (City of Salinas)
2. Intersection 2 – US 101 Northbound Ramps / West Laurel Drive (Caltrans)
3. Intersection 3 – US 101 Southbound Offramp / West Laurel Drive (Caltrans)
4. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive (City of Salinas)
5. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe (Monterey County)
6. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway (City of Salinas)
7. Intersection 7 – North Davis Road / West Rossi Street (City of Salinas)
8. Intersection 8 – North Main Street (State Route 183) / Rossi Street (Caltrans)
9. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) (Caltrans)
10. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) (Caltrans)
11. Intersection 11 – Davis Road / Blanco Road (Monterey County)
12. Intersection 12 – North Main Street / Alvin Drive (City of Salinas)
13. Intersection 13 – North Main Street / Laurel Drive (City of Salinas)

1.3 Analysis Scenarios

Traffic operations for the following analysis scenarios were analyzed:

1. Existing Conditions
2. Existing Plus Project Conditions (both project alternatives)
3. Background Conditions
4. Background Plus Project Conditions (both project alternatives)
5. Cumulative Without Project Conditions

6. Cumulative Plus Project Conditions (both project alternatives)

Improvements recommended to mitigate impacts for each development scenario are recommended where warranted.

1.4 Traffic Operation Evaluation Methodologies

Intersection traffic operations were evaluated based upon the level of service (LOS) concept. LOS is a qualitative description of an intersection's operations, ranging from LOS A to LOS F. Level of Service "A" represents free flow uncongested traffic conditions. Level of Service "F" represents highly congested traffic conditions with unacceptable delay to vehicles at intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. LOS descriptions for each type of existing traffic control at the study intersections (i.e., signal, all-way stop and one-/two-way stop) are included as **Appendix A**.

Intersection traffic operations were evaluated using the Synchro© traffic analysis software (Version 10) using both the 2010 and 2000 Highway Capacity Manual (HCM) methodologies. The average delay is then correlated to a level of service. For two-way stop-controlled intersections, only the vehicle delay for side street traffic is analyzed. LOS for each side street movement is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps. Improvements are warranted when a side street approach reaches LOS F for two-way stop-controlled intersections. When using the HCM 2010 and 2000 methods for the analysis of signalized and all-way stop-controlled intersections, the overall intersection delay is used to determine LOS.

Intersections 1 and 2 (Adams Street / West Laurel Drive and US 101 Northbound Ramps / West Laurel Drive) are operated by the same signal controller. The HCM 2010 cannot analyze intersections that share a controller. Hence, these two intersections are analyzed using the HCM 2000 methodologies. The remaining four study intersections are analyzed using the HCM 2010 methodologies.

Also, traffic signals at Intersections 12 and 13 North Main Street / Alvin Drive and North Main Street / Laurel Drive are coordinated using the InSync adaptive traffic control system. This system optimizes the signal phase lengths and their sequence and also coordinates traffic flow between adjacent InSync-controlled signals. Currently, there is no process to model InSync signal operations in computerized operations software; hence the HCM 2010 methodologies are used to assess operations at these intersections. This analysis therefore constitutes a conservative assessment of operations at these two intersections.

1.5 Level of Service Standards - Study Network

This study assesses operations at intersections under three different jurisdictions – City of Salinas, Monterey County and Caltrans. Both the City of Salinas and Monterey County have an overall level of service (LOS) standard of LOS D. The overall Caltrans level of service is the transition between LOS C and LOS D, abbreviated herein as LOS C-D.

As noted in Section 1.4, the Highway Capacity Manual does not provide overall levels of service for one-way stop-controlled intersections; rather, it only provides side-street operations for this

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type of traffic control. Side-street operations represent delay for the entire stop-controlled approach, regardless of the number of lanes. For the purposes of this analysis, a standard of LOS E is applied to side-street operations at these intersections, given that intersection improvements such as signalization and channelization are generally not warranted until the side street LOS is F. Also, side street traffic volumes are typically much lower than volumes on the major street and only represent a small portion of the overall intersection operations.

1.6 Significance Criteria

According to the California Environmental Quality Act (CEQA) guidelines, a Project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. The following significance criteria have been used within this study:

1.6.1 Monterey County

For the purposes of this analysis, a significant impact would occur at any intersection under the jurisdiction of Monterey County in the following circumstances:

Signalized Intersection (Intersection 11):

- A significant impact would occur if an intersection operating at LOS A, B, C, or D pre-Project degrades to E or F with the addition of Project traffic.
- For intersections already operating at unacceptable level E or F pre-Project, any increase (one vehicle) in traffic is considered significant.

One- or Two-Way Stop-Controlled Intersection (Intersection 5):

- A significant impact would occur if the side-street at an intersection operating at LOS A, B, C, D or E pre-Project degrades to LOS F with Project traffic; or
- If any traffic signal warrant is met with the addition of Project traffic; or
- For side-streets already operating at LOS F pre-Project, the addition of any Project traffic during the deficient peak hour would be considered significant, regardless of its effects on delay.

1.6.2 City of Salinas

For the purposes of this analysis, a significant impact would occur at any study intersection under the jurisdiction of the City of Salinas in the following circumstances:

Signalized Intersection (Intersections 1, 4, 6-7, 12-13):

- A significant impact would occur if an intersection operating at LOS A, B, C, or D pre-Project degrades to E or F with the addition of Project traffic.
- For intersections already operating at unacceptable level E or F pre-Project, any increase (one vehicle) in traffic is considered significant.

1.6.3 Caltrans

For the purposes of this analysis, a significant impact would occur at any intersection or roadway segment under the jurisdictions of Caltrans in the following circumstances:

Signalized Intersection (Intersections 2-3, 8-10):

- A significant impact would occur if an intersection operating at LOS A, B, or C pre-Project degrades to D, E or F with the addition of Project traffic; or
- For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

1.7 Impact Fees

1.7.1 Transportation Agency for Monterey County

The Transportation Agency for Monterey County (TAMC) and its member jurisdictions have adopted a county-wide, regional development impact fee to cover the costs for studies and construction of many roadway improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to new development within Monterey County. The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc. *The Regional Impact Fee Nexus Study Update* was updated in October 2018 by Wood Rodgers.

TAMC, Monterey County and Caltrans have agreed that the payment of the TAMC fee satisfies the Project's fair share contribution to cumulative impact mitigation throughout the regional highway system. This includes highways that will operate deficiently but no capital improvement Project is programmed to correct the deficiency. Projects partially funded by the TAMC fee in North Monterey County and the vicinity of Salinas include the following. Additional funding will be provided by Measure X, the Transportation Sales Tax measure. These local funding sources are anticipated to leverage State and federal funding sources to fully fund the improvements. Toll roads are also being considered as a funding source.

1. TAMC Improvement 2 – SR 156 Widening from US 101 to Castroville Boulevard
2. TAMC Improvement 4 - Davis Road North from Blanco Road to Market Street (SR183)
3. TAMC Improvement 5 – Davis Road South from Blanco Road to Reservation Road, including replacement of bridge over Salinas River
4. TAMC Improvement 10 – US 101 Widening from Airport Boulevard to Boronda Road

1.7.2 Monterey County Traffic Impact Fee

Monterey County is developing a traffic impact fee. It is expected to be adopted in late 2019. A list of improvements and the amount of the impact fee are not currently available. The fee is would not be applicable to the Project unless the fee program is adopted by Monterey County before the Project is approved. This fee is not able to be imposed at this time.

1.7.3 Salinas Traffic Improvement Program

The City of Salinas Traffic Improvement Program – 2010 Update, Wood Rodgers, March 2010, is the technical document used to establish the Salinas Traffic Fee Ordinance (TFO), which is the

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primary funding source for transportation improvements to mitigate impacts of cumulative development as the City builds out its current General Plan. A traffic impact fee is assessed to new development within the City of Salinas to off-set its cumulative impacts on the circulation system that is under the City's jurisdiction. As the project site is not located in the City of Salinas, the TFO fee would not be applicable to the Project.

Improvements with TFO funding included in the Traffic Improvement Program that are located in the vicinity of the Project site are listed below along with their individual Traffic Improvement Program project number. as follows.

1. TFO 26 – Western Bypass. This improvement will construct a new six-lane divided arterial between the Boronda Road / US 101 interchange and Blanco Road, mostly west of Boronda Road, Davis Road and the Boronda community.
2. TFO 27 – Alvin Drive Extension. This improvement will extend Alvin Drive westward over US 101 and to the Western Bypass as a four-lane arterial.
3. TFO 28A and 28B – Laurel / US 101 Widening (Davis to Adams) and Laurel Improvements (Adams to Main). These improvements will widen West Laurel Drive to six lanes between North Davis Road and Adams Street, and add left turn lanes in both directions between Adams Street and North Main Street.
4. TFO 29 – Rossi Street Extension. This improvement extends Rossi Street as a two-lane minor arterial west of North Davis Road to the Westside Bypass, thus creating a new access to the Boronda community near the project site.
5. TFO 31 – Main Street Widening (Expressway Type II). This improvement widens Main Street from a four to six-lane arterial between Casentini Street and Market Street.
6. TFO 73 – Davis Road / Blanco Road Intersection. This improvement widens the intersection to add the following lanes:
 - a. Second northbound Davis Road left turn lane;
 - b. Northbound Davis Road right turn lane;
 - c. Second southbound Davis Road through lane;
 - d. Eastbound Blanco Road right turn lane;
 - e. Second westbound Blanco Road left turn lane.

1.8 Unique Project Traffic Characteristics

The Quattrin H2A project will provide farmworker housing, which will assist in alleviating overcrowding in farmworker households. According to the "Farmworker Housing Study and Action Plan for Salinas Valley and Pajaro Valley," California Institute for Rural Studies, June 2018, farmworker households have an occupancy rate of 7.00 persons per dwelling unit. These are scattered throughout the City of Salinas and surrounding communities. Farmworkers at these scattered locations must use private cars (many in carpools) to commute to and from work as well as shopping and personal trips.

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Residents of the Quattrin H2A housing project will be prohibited from having a car and will be transported to and from work and all other destinations by bus. Vehicle occupancy will increase from 2 to 3 persons per vehicle to over 20 persons per vehicle. There will be a corresponding reduction in traffic volumes on the street systems in Salinas and surrounding area. The project will thus have a positive city-wide impact on traffic congestion, which will likely more than offset any increase in traffic at nearby intersections. This is not possible to quantify but could easily be several times the increase anticipated in this study. This study does not provide any credit for this phenomenon, except for qualifying the determination of whether the project creates a significant impact at individual intersections.

The apartment alternative may have some similar traffic benefits. However, because the apartments will be available to the general public, they are analyzed as standard apartments. No credit is given in the analysis of determination of impact significance.

2 EXISTING TRAFFIC CONDITIONS

This chapter evaluates Existing traffic conditions and includes a description of the Project setting.

2.1 Existing Traffic Network

The Project site is located on the west side of North Davis Road at West Rossi Street in unincorporated Monterey County. The project site is located adjacent to the City of Salinas, which lies just east of West Davis Road from the project site.

The key roadways in the vicinity of the proposed project include US 101, Davis Road, Laurel Drive, Main Street, Market Street, Blanco Road, Alvin Drive, Rossi Street, Calle Del Adobe, Post Drive, Adams Street and El Rancho Way. These facilities are described below, in alphabetical order:

Adams Street is a two-lane collector street providing access to neighborhoods north of West Laurel Drive and east of US 101. The posted speed limit is 35 miles per hour (mph).

Alvin Drive is a four-lane minor arterial street in northern Salinas, providing access to adjacent residential neighborhoods and schools. The posted speed limit is 35 mph.

Blanco Road is a two- to four-lane roadway in Monterey County and southern Salinas, connecting Marina and Salinas via Reservation Road. As such, it is a major commute corridor between the Monterey Peninsula and the Salinas Valley. The posted speed limit is 55 mph west of Davis Road and 50 mph east of Davis Road.

Calle Del Adobe provides the primary access to the Boronda area from North Davis Road. It is a two-lane east-west arterial that extends from the Davis Road/Laurel Drive intersection to Boronda Road. The posted speed limit is 45 mph between Boronda Road and Post Drive and 35 miles per hour between Post Drive and North Davis Road.

Davis Road extends along the easterly boundary of the Boronda area and generally represents the western limit line for the City of Salinas in the vicinity of the planning area. It extends from Reservation Road – near the unincorporated Toro Park neighborhood south of Salinas – to Boronda Road in northwestern Salinas. In the study area, Davis Road is a four-lane major arterial. The posted speed limit in the study area is 35 mph north of Larkin Street, 45 miles per hour between Larkin Street and Blanco Road, and 55 mph south of Blanco Road.

El Rancho Way provides access to a residential neighborhood and a hotel. The posted speed limit is 25 mph.

Laurel Drive is a major four-lane east-west arterial in the city of Salinas. Laurel Drive extends easterly from North Davis Road and has an interchange with US 101. It continues east through most of the northerly portion of the City of Salinas and is one of the major east-west arterials serving the city of Salinas. The posted speed limit is 35 mph.

Main Street is a four- to six-lane north-south major arterial in southern, central and northern Salinas. It provides primary access to the Downtown from the north and south, as well as to northbound and southbound US 101 approximately one-half mile north of Rossi Street. In the study area, commercial and residential land uses line Main Street. Between US 101 and Market

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Street, Main Street is also State Route 183. In the study area, the posted speed limit is 35 mph north of US 101 and 40 mph south of US 101.

Market Street is a four-lane east-west major arterial in the City of Salinas. the vicinity of the project site, connecting the Downtown with eastern and western Salinas. It provides direct access to commercial and industrial land uses along its frontage. West of Main Street, Market Street is also Sate Route 183, which continues west towards Castroville. The posted speed limit is 25 mph east of Main Street, 40 mph between Main Street and Davis Road, and 55 mph west of Davis Road.

Market Circle is a two-lane local street providing access to agricultural fields and rural residences. The presumed speed limit is 25 mph.

Rossi Street is a two-lane east-west minor arterial in western and central Salinas. It provides access to residential and commercial land uses. The posted speed limit is 40 mph west of North Main Street and 25 mph east of North Main Street.

Post Drive is a four-lane commercial collector street that runs in a quarter circle between North Davis Road and Calle Del Adobe. The presumed speed limit is 35 mph.

US 101 is a regional north-south facility through the city of Salinas. It is currently a four-lane roadway with interchanges in the city. The posted speed limit through the city is 65 mph. The nearest interchange access points to the project from US 101 are the Laurel Drive interchange and the partial Main Street interchange.

2.2 Existing Pedestrian Network

There are no sidewalks along the Project frontage of North Davis Road, although a sidewalk does exist on this side of North Davis Road just north of the project site. Sidewalks are present on the east frontage of North Davis Road. Both sidewalks are continuous to the north and east of the project site, including onto West Laurel Drive, Calle Del Adobe, Post Drive, Adam Street, West Rossi Street and West Market Street (State Route 183). These connections allow continuous travel for pedestrians to various commercial and industrial areas in western and downtown Salinas.

There are marked crosswalks present at all study intersections.

2.3 Existing Bicycle Network

There are four types of bicycle facilities defined by Caltrans. Each type is described below:

1. Bike path (Class I) – A separate right-of-way designed for the exclusive use of bicycle and pedestrian traffic with crossflow minimized.
2. Bike lane (Class II) – A striped lane for one-way bike travel on a street or highway, typically including signs placed along the street segment.
3. Bike route (Class III) – Provides a shared use with pedestrian or motor vehicle traffic. Typically, these facilities are city streets with signage designating the segment for Bike Route without additional striping or facilities.

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4. Separated Bikeways (Class IV) – A bikeway for the exclusive use of bicycles and includes a separation between the bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

A bicycle network map for Monterey County is included in **Appendix B**. This map is cited from *Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan*, Alta Planning + Design, December 2011 (“TAMC Bicycle and Pedestrian Master Plan”).

Bicycle facilities are provided along the following roadways in the study network:

- Bike Path (Class I):
 - a. Rossi-Rico Parkway: between North Davis Road (north of West Rossi Street) and West Rossi Street (east of Sansome Street)
- Bike Lane (Class II):
 - a. North Davis Road: between Blanco Road and Post Drive and between West Laurel Drive and Boronda Road (both directions)
 - b. West Rossi Street: between North Davis Road and Sherwood Drive (both directions)
 - c. Blanco Road: between Reservation Road in Marina and Luther Way in Salinas (both directions)
 - d. North Main Street: between Alvin Drive and San Juan Grade Road
 - e. Alvin Drive: between North Main Street and Kip Drive

2.4 Existing Transit Service

Monterey-Salinas Transit (MST) provides fixed-route bus service in Monterey County and Peninsula cities. Thirteen MST bus lines provides service to the study area:

- Line 20 (Salinas – Monterey). This line provides weekday and weekend service roughly every 30 minutes between roughly 5:00 AM – 3:00 AM the following morning.
- Line 21 (Pebble Beach – Salinas Express). This line provides via just six runs per day (three in each direction) on weekdays and weekends.
- Line 23 (Salinas – King City). This line provides weekday and weekend service roughly every two hours between roughly 4:00 AM – 10:30 PM.
- Line 25 (CSUMB – Salinas). This line provides weekday and weekend service every 60 minutes between roughly 6:30 AM – 10:30 PM.
- Line 28 (Watsonville – Salinas via Castroville). This line provides weekday and weekend service every two hours between roughly 6:30 AM – 10:00 PM.
- Line 29 (Watsonville – Salinas via Prunedale). This line provides weekday and weekend service every two hours 90 minutes between roughly 6:00 AM – 8:00 PM.
- Line 42 (Westridge – Alisal). This line provides only weekend service every 90 minutes between roughly 9:00 AM – 9:00 PM.

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- Line 44 (Northridge – Salinas). This line provides daily service every 75 minutes between roughly 6:30 AM – 6:30 PM.
- Line 46 (Salinas – Natividad). This line provides only weekday service every 60-120 minutes between roughly 7:00 AM – 6:00 PM.
- Line 61 (Salinas – VA-DOD Clinic). This line provides weekday and weekend service every 60 minutes between roughly 6:00 AM – 10:30 PM.
- Line 72 (Presidio – North Salinas). This line provides weekday service via just four runs (two AM runs and two PM runs).
- Line 86 (King City – San Jose/SJ Airport). This line provides just four weekday runs (two in each direction) and eight weekend runs (four in each direction).
- Line 95 (Williams Ranch – Northridge). This line provides weekday and weekend service every two hours between roughly 7:00 AM – 5:00 PM.

The nearest bus stops to the Project site (served by Line 72 only) are located on West Rossi Street east of North Davis Road (both directions). These stops located at approximately a six-minute walk from the project site. Bus stops are also located on North Davis Road south of Post Drive (served by Lines 44 and 72), which are more than a 13-minute walk away from the project site. Additional bus stops are located even further away from the project site.

2.5 Existing Conditions Traffic Circulation

2.5.1 Intersection Operations

Traffic volumes counts at the study intersections were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Wednesday, May 22, 2019 (Intersections 1 through 6) and Tuesday, September 24, 2019 (Intersections 7 through 13). Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM and PM peak hour volumes were derived. **Exhibit 3** depicts the peak turning movement volumes for the study intersections under Existing Conditions. **Appendix C** contains the traffic count data collected at these study intersections.

Appendix D contains a comparison of the May 2019 and September 2019 volumes at Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive, where data was collected during both count periods in order to verify if there were significant variation in the volumes from the two count periods. The exhibit shows that the September 2019 volumes at this intersection were between approximately 3% - 7% higher than those collected in May 2019. After balancing of the volumes along the adjacent West Laurel Drive intersections, the difference lowers to between approximately 1 – 2%. Both sets of percentages are below the typical day-to-day volume variation of 10% experienced at intersections. Therefore, it is concluded that the September 2019 volumes do not significantly differ from the May 2019 volumes.

Existing intersection lane configurations, traffic controls and levels of service at the study intersections are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing conditions can be found in **Appendix E**.

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Most of the study intersections currently operate at or better than their respective level of service standards. However, the following three intersections operate below their respective standards under Existing conditions:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

2.5.2 Pedestrian Circulation

All study intersections nearest the project site have less than 10 pedestrians crossing each approach leg during the AM and PM peak hours. This low level of pedestrian activity also occurs at most of the study intersections. However, the three North Main Street intersections all have moderate to high levels of pedestrian crossings, averaging 66 AM and 57 PM pedestrian crossings between them.

2.5.3 Bicycle Circulation

There is little to no bicycle traffic at the study intersections. The highest amount of bicycle traffic was on Laurel Drive, which had one (AM) and two (PM) through bicyclists during the study peak periods.

3 EXISTING PLUS PROJECT CONDITIONS – AG HOUSING

3.1 Ag Housing Project Description

This section of the report focuses on Existing Plus Project conditions with Project Alternative 1 – agricultural employee housing.

Project Alternative 1 would build six residential buildings providing a total of 1,200 beds for 1,200 employees without dependents. All employees housed on site would be H2A Visa workers, i.e., seasonal employees who are US residents or reside permanently outside of the United States.

None of the employees would have their own vehicles. Instead, the employees would be bussed or carpooled to agricultural fields throughout Monterey County. All outbound bus/vanpool trips would occur between 2:00 – 5:00 AM and all inbound bus/vanpool trips would occur between 12:00 – 4:00 PM.

Both buses and vans will be used for employee bussing and vanpools. The buses would be stored offsite and driven to and from the site each day, while the vans would be stored onsite. During weekday evenings and weekends, bus service into Salinas would be provided to the employees, as necessary, to transport employees to shopping, recreation and religious services.

The Project would only be occupied eight-and-a-half months of the year, from mid-March through November.

All project access would be via a westerly extension of West Rossi Street. This extension would only provide access to the project site and the adjacent agricultural fields; the West Rossi Street extension would not be connected to other roadways in Salinas or Boronda by the project.

3.2 Project Trip Generation – Ag Housing With Casa Boronda Data

Trip generation estimates are typically based on rates from *Trip Generation Manual*, 10th Edition, published by the Institute of Traffic Engineers in 2017 (Trip Generation Manual). However, this publication does not include trip rates for agricultural employee housing projects. Instead, as requested by Monterey County staff, the Project trip generation was derived using trip activity at an existing agricultural employee housing facility in Monterey County. Inbound and outbound traffic at the Casa Boronda agricultural housing facility on Madison Lane in the Boronda Area – just west of Salinas, was collected during the peak agricultural season on Tuesday, April 16, 2019 between 7:00 – 9:00 AM and 4:00 – 6:00 PM. The collected traffic data can be found in **Appendix F**. From this data, the AM and PM one-hour peak volumes were derived and converted into trips per employee using the roughly 600 employees that reside at that facility. The derived rates were used to estimate the AM and PM peak hour traffic generated by the proposed project.

The Casa Boronda project generates 4 AM peak hour trips and 43 PM peak hour trips. This is about two times the peak hour volume estimates of 2 AM peak hour trips and 22 PM peak hour trips based on operator forecasts at the time of preparation of the *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis*, Keith Higgins Traffic Engineer, July 3, 2017.

A comparison of the estimated trip generation in the traffic study to the actual driveway counts is provided in **Exhibit 5**.

Much of the increase appears to be associated with a higher number of bus trips than originally anticipated. During observations of driveway traffic at Casa Boronda in May 2018, it was noted that the buses routinely carried 20 or fewer workers, which was less than half of their capacity. This appeared to result in two times as many buses entered and exited the site as were originally forecasted. They were often followed by pickup trucks that often left with the buses after the workers disembarked. Foremen were assumed to arrive at Casa Boronda in their own vehicles and ride the bus to the fields with the workers. Apparently, many foremen drive separate vehicles to the fields. The traffic count was conducted on a single random day. Farm operations may vary from day to day, resulting in fewer buses being needed with a corresponding reduction in project trips. However, this is the only actual count data available. Previous traffic studies of farmworker housing projects were based on estimates by the project applicant.

Traffic volumes during off-peak hours, except for the early morning project peak hour when workers are leaving for the fields, are expected to be the same as estimated in the Casa Boronda traffic study. This is because project occupants are generally not allowed to have personal vehicles. Typical residential trips such as shopping, school and recreation will not occur. The PM peak hour would then represent about 25% of the daily total.

Exhibit 5 summarizes the Project trip generation for the ag employee housing alternative. The Project is estimated to generate 346 weekday daily trips, with 8 trips (6 in, 2 out) during the AM peak hour and 86 trips (44 in, 42 out) during the PM peak hour. This is the trip activity used to evaluate potential project traffic impacts on the surrounding street system.

3.3 Unique Project Trip Generation Characteristics

The Project will only be occupied eight-and-a-half months out of the year, which is typical of most H2A housing projects in the Salinas area. Therefore, the project trip generation estimate in the prior paragraph will only occur when the project is open. The project would generate zero trips when closed. As a result, a seasonally adjusted trip generation is also included on **Exhibit 5**, to account for the project only being open approximately 71% of the year. The seasonally adjusted project trip generation would be 245 daily trips, with 6 trips (4 in, 2 out) during the AM peak hour and 61 trips (31 in, 30 out) during the PM peak hour. This is a factor that should be considered in the determination of project H2A traffic impact significance determination.

The use of the Casa Boronda traffic counts to project the project trip activity is a conservative estimate of the ag employee housing trips, as nearly all of the project bussing and vanpooling is anticipated to occur outside of the AM and PM street peak hours. Specifically, the project applicant anticipates that all morning bussing and vanpools will occur between 2:00 – 5:00 AM and between 12:00 – 4:00 PM. Restricting the hours of the bussing and vanpools outside of the peak hours is a form of Transportation Demand Management (TDM), and is described as such in this analysis. As noted on **Exhibit 6**, the project trip generation with the bussing and vanpools could constitute only 20% of the Casa Boronda traffic counts. The effects of the TDM measures on the project impacts for the ag employee housing project are addressed at each intersection

with deficient operations for all Ag Employee Housing analysis scenarios in this report. Operations with the TDM measures are also indicated on **Exhibit 4A**.

Exhibit 6 depicts the trip distribution for the Project. The trip distribution was combined with the Project trip generation to derive the Project trip assignment depicted in **Exhibit 7**.

3.4 Project Access Improvements

The project's vehicular access is on an extension of West Rossi Street west of North Davis Road. This will require modifications to the lane configuration and existing traffic signal at the North Davis Road / West Rossi Street intersection. The analysis for Existing Plus Project, Background Plus Project and Cumulative Plus Project all assume the following intersection modifications, all of which the project will be responsible for implementation:

1. Construct eastbound West Rossi Street as one left turn lane and one shared through-right turn lane.
2. Remove and reconstruct the existing median on West Rossi Street east of North Davis Road to remove one eastbound through lane leaving the intersection and add a new westbound through lane at the intersection. This improvement would also retain the existing dual westbound left turn lanes and single westbound right turn lane.
3. Add a northbound West Davis Road left turn lane.
4. Revise the existing signal infrastructure and signal phasing to reflect the above lane configuration modifications.

3.5 Existing Plus Project Condition Traffic Circulation – Ag Housing

3.5.1 Intersection Operations

The Project trip assignment for the ag employee housing alternative (**Exhibit 7**) was added to the existing traffic volumes in **Exhibit 3** to create the Existing Plus Project – Ag Housing volumes depicted in **Exhibit 8**.

Existing Plus Project – Ag Housing condition intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing Plus Project – Ag Housing conditions can be found in **Appendix G**.

Most of the study intersections would operate at or better than their respective level of service standards under Existing Plus Project – Ag Housing conditions. However, the following three intersections would operate continue to operate below their standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. This also does not account for the reduction in City-wide traffic resulting from the project as discussed in Section 1.8 of this report. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. This also does not account for the reduction in City-wide traffic resulting from the project as discussed in Section 1.8 of this report. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3.5.2 Pedestrian Circulation

The Project is anticipated to generate a small to moderate amount of pedestrian traffic. This would include pedestrian trips to the existing commercial areas on North Davis Road and to Downtown Salinas. There are existing and continuous sidewalks between the project site and these locations, thus providing adequate capacity for the additional pedestrian traffic. Therefore, the Project would not represent a significant impact to pedestrian circulation.

3.5.3 Bicycle Circulation

The Project is anticipated to generate a small amount of bicycle traffic. The existing bike lanes and shoulders on the study street network will be adequate to accommodate this additional bicycle traffic. Therefore, the Project would not represent a significant impact to bicycle circulation.

3.5.4 Transit Circulation

The Project is anticipated to generate little or no transit demand. Therefore, the Project would not represent a significant impact to transit service.

3.6 Impact Fees

The Project would be subject to the TAMC Regional Development Impact Fee and the Salinas Traffic Improvement Program fee. The Project may also be subject to a Monterey County transportation impact fee, if one is adopted prior to approval of the study Project by Monterey County.

4 EXISTING PLUS PROJECT CONDITIONS – APARTMENTS

4.1 Project Alternative Description

This section of the report focuses on Existing Plus Project conditions with Project Alternative 2 – standard apartments. Although the initial project is anticipated to be the agricultural employee housing, the project may be converted into standard apartments in the future, hence its inclusion within this analysis.

The Project Alternative 2 would build the same six residential buildings as Project Alternative 1. However, the buildings would be modified to provide up to 200 standard apartment units.

The trip generation estimate for Project Alternative 2 is based on rates from *Trip Generation Manual*, 10th Edition, published by the Institute of Traffic Engineers in 2017 (Trip Generation Manual).

Project access for the apartment alternative would be the same as the H2A project alternative, with all project driveways located along a westerly extension of West Rossi Street. Under the Existing Plus Project scenario, this extension would only provide access to the project site and the adjacent agricultural fields; the West Rossi Street extension would not be connected to other roadways in Salinas or Boronda by the project.

4.2 Project Trip Generation – Apartments

Exhibit 5 provides the trip generation estimate for the apartment alternative. The Project is estimated to generate 1,464 weekday daily trips, with 92 trips (21 in, 71 out) during the AM peak hour and 112 trips (71 in, 41 out) during the PM peak hour. This is the trip activity used to evaluate potential project traffic impacts on the surrounding street system.

4.3 Project Trip Distribution and Assignment – Apartments

Exhibit 9 depicts the trip distribution for the Project. The trip distribution was combined with the Project trip generation to derive the Project trip assignment depicted in **Exhibit 10**.

4.4 Project Access Improvements

As with the project's ag employee housing alternative, vehicular access for the apartments alternative would be via an extension of West Rossi Street west of North Davis Road. This will require modifications to the lane configuration and existing traffic signal at the North Davis Road / West Rossi Street intersection. The analysis for Existing Plus Project, Background Plus Project and Cumulative Plus Project with the apartment alternative all assume the same North Davis Road / West Rossi Street intersection modifications as previously described under the ag employee housing alternative, all of which the project will be responsible for implementation.

4.5 Existing Plus Project Condition Traffic Circulation – Apartments

4.5.1 Intersection Operations

The Project trip assignment for the apartments (**Exhibit 10**) was added to the existing traffic volumes in **Exhibit 3** to estimate the Existing Plus Project – Apartment volumes depicted in **Exhibit 11**.

Existing Plus Project – Apartment condition intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing Plus Project – Apartment conditions can be found in **Appendix H**.

Most of the study intersections would operate at or better than their respective level of service standards under Existing Plus Project – Apartment conditions. However, the following three intersections would continue to operate below their standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.9 seconds of delay in the AM peak hour and 0.4 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

- Recommendation: Implement the following:
 1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31.
- Operations after Implementation of Improvement: LOS C (AM and PM).

- Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):
- The level of service under PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.2 seconds of delay in the AM peak hour and 0.9 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.
- Recommendation: Implement the following:
 1. Add an eastbound right turn lane on West Market Street.
 - Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
 - Responsibility for Improvement: The study project should implement this improvement.

4.5.2 Pedestrian Circulation

The Project is anticipated to generate a small to moderate amount of pedestrian traffic. This would include pedestrian trips to the existing Boronda Meadows Elementary School, commercial areas on North Davis Road and to Downtown Salinas. There are existing and continuous sidewalks between the project site and these locations, thus providing adequate capacity for the additional pedestrian traffic. Therefore, the Project would not represent a significant impact to pedestrian circulation.

4.5.3 Bicycle Circulation

The Project is anticipated to generate a small amount of bicycle traffic. The existing bike lanes and shoulders on the study street network will be adequate to accommodate this additional bicycle traffic. Therefore, the Project would not represent a significant impact to bicycle circulation.

4.5.4 Transit Circulation

The Project is anticipated to generate little or no transit demand. Therefore, the Project would not represent a significant impact to transit service.

4.6 Impact Fees

The Project would be subject to the TAMC Regional Development Impact Fee and the Salinas Traffic Improvement Program fee. The Project may also be subject to a Monterey County transportation impact fee, if one is adopted prior to approval of the study Project by Monterey County.

Note that the project's fees applicable to the apartments would be different compared to the fees applicable for the ag employee housing.

5 BACKGROUND CONDITIONS

This section describes Background traffic conditions. It accounts for traffic growth on the study network over a five-year period but does not include trips from the Project.

5.1 Derivation of Background Condition Traffic Volumes

Weekday AM and PM peak hour traffic generated by projects approved for development but not yet constructed or occupied was estimated based on a growth rate of 2% per year for five years (i.e., 10% increase in traffic). This is consistent with a review of traffic volumes at the study intersections over the past five years, referenced from past traffic studies¹ and data collected for this analysis. This review found traffic volume growth of approximately 2% per year at the study intersections which is summarized in **Appendix I**.

Exhibit 12 contains the Background AM and PM traffic volumes at the study intersections.

5.2 Background Traffic Conditions

5.2.1 Intersection Operations

Background intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background traffic conditions can be found in **Appendix J**.

Most of the study intersections would operate at or better than their respective level of service standards under Background conditions. However, the following four intersections will operate below their respective standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM) and LOS D (PM).
4. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

5.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background conditions. There are no planned pedestrian infrastructure improvements in the study area under Background conditions.

¹ Traffic Studies:

1. *Casa Boronda Agricultural Employee Housing Project*, Keith Higgins Traffic Engineer, July 3, 2017. Existing volumes from 2014.
2. *The Draft West Area Specific Plan Transportation Impact Analysis*, Fehr & Peers, June 2018. Existing volumes from 2016.

5.2.3 Bicycle Circulation

Bicycle traffic is not anticipated to increase significantly under Background conditions. There are no planned bicycle infrastructure improvements in the study area under Background conditions.

5.2.4 Transit Circulation

There are no planned transit circulation improvements in the study area under Background conditions.

6 BACKGROUND PLUS PROJECT CONDITIONS – AG HOUSING

This section describes the analysis results for Background Plus Project – Ag Housing traffic conditions, which combines Project Alternative 1 traffic with the Background volumes.

6.1 Derivation of Background Plus Project – Ag Housing Condition Traffic Volumes

The Project trip assignment for the ag employee housing (**Exhibit 7**) was combined with the Background volumes (**Exhibit 12**) to estimate the Background Plus Project – Ag Housing intersection volumes depicted in **Exhibit 13**.

6.2 Background Plus Project Traffic Conditions – Ag Housing

6.2.1 Intersection Operations

Background Plus Project – Ag Housing intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background Plus Project – Ag Housing traffic conditions can be found in **Appendix K**.

Most of the study intersections would operate at or better than their respective level of service standards under Background Plus Project – Ag Housing conditions. However, the following five intersections would operate below their standards:

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:

No change would occur in the Background LOS C at this intersection. However, the level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 1.7 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the addition of the Project trips and the TDM measures described in Section 3.3, the intersection operations would remain at LOS D. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway:

The level of service under AM and PM conditions would be LOS E, compared to LOS E without the Project. The H2A Project would result in an increase of 0.1 seconds of delay in the AM peak hour and 1.7 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and four trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. The H2A Project would result in an increase of 0.1 seconds of delay in the AM peak hour and 0.3 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

The level of service under PM conditions would be LOS D, compared to LOS D without the Project. The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection. Also, if this intersection was

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under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

6.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Background Plus Project conditions.

6.2.3 Bicycle Circulation

Bicycle demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Background Plus Project conditions.

6.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly over Existing Plus Project conditions, due to the lack of bus stops near the Project site. As such, the Project would not represent a significant impact to transit circulation under Background Plus Project conditions.

7 BACKGROUND PLUS PROJECT CONDITIONS – APARTMENTS

This section describes the analysis results for Background Plus Project – Apartments traffic conditions, which combines Project Alternative 2 traffic with the Background volumes.

7.1 Derivation of Background Plus Project Condition Traffic Volumes – Apartments

The Project trip assignment for the apartments (**Exhibit 10**) was combined with the Background volumes (**Exhibit 12**) to estimate the Background Plus Project – Apartments intersection volumes depicted in **Exhibit 11**.

7.2 Background Plus Project Traffic Conditions – Apartments

7.2.1 Intersection Operations

Background Plus Project – Apartments intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background Plus Project – Apartments traffic conditions can be found in **Appendix L**.

Most of the study intersections would operate at or better than their respective level of service standards under Background Plus Project – Apartments conditions. However, the following five intersections would operate below their standards:

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:

The level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 3.8 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement either of the following groups of improvements:
 1. Add a third westbound left turn lane on West Laurel Drive and a third southbound receiving lane on North Davis Road leaving the intersection; OR

2. Implement the following improvements, both of which are incorporated into the recommendations at this intersection under Cumulative Plus Project – Apartments conditions:
 - a. Implement the Western Bypass. This roadway, proposed by the Salinas TFO, would be a new arterial roadway parallel to and west of North Davis Road. As shown under Cumulative Plus Project – Apartment conditions, the Western Bypass would divert traffic off of West Davis Road, reducing the total traffic through this intersection. This improvement is Salinas TFO Improvement 26.
 - b. Optimize the signal timing at the North Davis Road / Calle Del Adobe – West Laurel Drive intersection.
- Operations after Implementation of Improvement options: LOS C (AM) and LOS D (PM) for both improvement options.
- Responsibility for Improvement: The project would be responsible for implementation of Improvement Option 1. Payment of Salinas TFO would constitute project's responsibility towards Improvement Option 2.
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.
3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway:

The level of service under AM and PM conditions would be LOS E, compared to LOS E without the Project. The Project would result in an increase in delay of 0.7 seconds in the AM peak hour and 3.9 seconds in the PM peak hour. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

 - Recommendation: Implement either of the following groups of improvements:
 1. Implement the following:
 - a. Restripe eastbound Post Drive as one left lane, one through lane and one right turn lane.
 - b. Convert the east/west left turn signal phasing on Post Drive – Commercial Driveway to permitted phasing (as opposed to the current split phasing); OR
 2. Implement the Western Bypass. This roadway, proposed by the Salinas TFO, would be a new arterial roadway parallel to and west of North Davis Road. As shown under Cumulative Plus Project – Apartment conditions, the Western Bypass would divert traffic away from West Davis Road, reducing the total traffic through this intersection. This improvement is Salinas TFO Improvement 26.
 - Operations after Implementation of Improvement options: LOS C (AM and PM) for Improvement Option 1 or LOS D (AM and PM) for Improvement Option 2.

- Responsibility for Improvement: The project would be responsible for implementation of Improvement Option 1. Payment of Salinas TFO would constitute the project's responsibility towards Improvement Option 2.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. The Project would result in an increase in delay of 1.2 seconds in the AM peak hour and 0.5 seconds in the PM peak hour. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS D (AM and PM).
- Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

The level of service under PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.1 seconds of delay in the AM peak hour and 1.4 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

- Recommendation: Implement the following:
 1. Add an eastbound right turn lane on West Market Street. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
- Responsibility for Improvement: The study project should implement this improvement.

7.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Background Plus Project conditions.

7.2.3 Bicycle Circulation

Bicycle demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Background Plus Project conditions.

7.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly over Existing Plus Project conditions, due to the lack of bus stops near the Project site. As such, the Project would not represent a significant impact to transit circulation under Background Plus Project conditions.

8 CUMULATIVE WITHOUT PROJECT CONDITIONS

This section describes the analysis results under Cumulative Without Project traffic conditions, which forecasts traffic conditions at buildout of the City of Salinas and Monterey County General Plans. This scenario does not include trips from the study Project. This condition represents conditions in approximately the Year 2045.

8.1 Derivation of Cumulative Without Project Condition Volumes

Traffic volumes under Cumulative Without Project conditions were estimated using volume forecasts from six prior traffic studies that analyzed the study network:

1. *Casa Boronda Agricultural Employee Housing Project*, Keith Higgins Traffic Engineer, July 3, 2017.
2. *The Draft West Area Specific Plan Transportation Impact Analysis*, Fehr & Peers, June 2018.
3. *Rodeo Property Traffic Impact Analysis*, Mott MacDonald, June 12, 2019.
4. *El Rancho Toro Agricultural Employee Housing Project Traffic Impact Analysis*, Keith Higgins Traffic Engineer, June 6, 2019.
5. *City of Salinas General Plan Circulation Element and Environmental Impact Report Traffic Study*, Higgins Associates, June 11, 2002.
6. *2007 Monterey County General Plan Draft Environmental Impact Report*, ICF Jones & Stokes, September 2008.

8.2 Network Modifications under Cumulative Conditions

Cumulative Without Project and Cumulative Plus Project conditions include multiple street network modifications near the study network. These modifications will divert traffic away from the study network. All improvements are in the City of Salinas Traffic Fee Ordinance.

The network modifications are:

1. TFO 26 – Western Bypass. This improvement will construct a new six-lane divided arterial between the Boronda Road / US 101 interchange and Blanco Road, mostly west of Boronda Road, Davis Road and the Boronda community.
2. TFO 27 – Alvin Drive Extension. This improvement will extend Alvin Drive westward over US 101 and to the Western Bypass as a four-lane arterial.
3. TFO 29 – Rossi Street Extension. This improvement extends Rossi Street as a two-lane minor arterial west of North Davis Road to the Westside Bypass, thus creating a new access to the Boronda community near the project site.

Please see Section 1.7.3 for a more detailed description of these improvements.

The analyzed traffic volumes for Cumulative Without Project and Cumulative Plus Project reflect the traffic diversions that would occur due to these network modifications.

With regards to the Western Bypass, its alignment between Blanco Road and West Market Street (State Route 183) is not defined. City staff has confirmed that there are no formal designs of the roadway south of West Market Street (State Route 183) beyond the conceptual alignment identified in the Salinas TFO, which indicates that it will run parallel to South Davis Road at approximately 800 feet to the west. This would mean that the Western Bypass would have an interchange or grade separation with SR 183 and an intersection with Blanco Road between South Davis Road and Hitchcock Road. Therefore, the traffic forecasts at the South Davis Road / Blanco Road intersection are taken from the traffic study for the West Area Specific Plan, whose cumulative traffic forecasts are consistent with the TFO alignment of the Western Bypass.

In addition, the improvements at the North Davis Road / West Rossi Street intersection previously discussed in Section 3.3 – as associated with the project's westward extension of West Rossi Street – are also assumed in place under Cumulative Without Project conditions. This is due to the Rossi Street Extension (TFO 29).

8.3 Cumulative Without Project Traffic Conditions

8.3.1 Intersection Operations

Cumulative Without Project traffic volumes are depicted on **Exhibit 15**. Cumulative Without Project intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Without Project traffic conditions can be found in **Appendix M**.

Some of the study intersections will operate at or better than their respective level of service standards. However, the following eight intersections operate below their respective standards under Cumulative Without Project conditions:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
2. Intersection 7 – North Davis Road / West Rossi Street – LOS F (PM).
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM).
6. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
7. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
8. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

8.3.2 Pedestrian Circulation

There are no planned pedestrian improvements in the study area under Cumulative Without Project conditions other than to construct sidewalks along future streets where appropriate and to close gaps in existing sidewalks.

8.3.3 Bicycle Circulation

The TAMC bike and ped plan proposes the following future bicycle improvements in the study area.

- Bike Lane (Class II):
 - a. Davis Road: between West Laurel Drive and Post Street and between Blanco Road and Reservation Road (both directions)
 - b. Calle Del Adobe: between North Davis Road and Boronda Road (both directions)
 - c. West Rossi Street: between North Davis Road and Boronda Road (both directions)
 - d. Alvin Drive: between North Main Street and North Davis Road and between Kip Drive and Natividad Road (both directions)
- Bike Path (Class III):
 - a. West Laurel Drive: between North Davis Road and Adams Street
 - b. Adams Street: between West Laurel Drive and Tulane Street

8.3.4 Transit Circulation

There are no anticipated transit improvements in the study area.

9 CUMULATIVE PLUS PROJECT CONDITIONS – AG HOUSING

This section describes the analysis results under Cumulative Plus Project traffic conditions, which combines the Cumulative Without Project volumes with the Project Alternative 1 trips.

9.1 Derivation of Cumulative Plus Project Condition Traffic Volumes – Ag Housing

The Project trip assignment for the ag employee housing (**Exhibit 7**) was added to the Cumulative Without Project volumes (**Exhibit 15**) to estimate Cumulative Plus Project – Ag Housing traffic volumes, which are depicted on **Exhibit 16**.

Note: The Rossi Street Extension is not anticipated to modify the project trip assignment.

9.2 Cumulative Plus Project Traffic Conditions – Ag Housing

9.2.1 Intersection Operations

Cumulative Plus Project – Ag Housing intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Plus Project – Ag Housing traffic conditions can be found in **Appendix N**.

Most of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project – Ag Housing conditions. However, the following eight intersections would operate below their standards. These are the same intersections that will be deficient without the Project.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
2. Intersection 7 – North Davis Road / West Rossi Street – LOS F (PM).
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM).
6. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
7. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
8. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the

significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 7 – North Davis Road / West Rossi Street:

The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. With the TDM measures, the Project would add two trips (AM) and twelve trips (PM) to this intersection. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection both with and without the TDM measures.

- Recommendation: Implement the following:
 1. Add a second eastbound left turn lane on West Rossi Street
 2. Add an eastbound right turn lane on West Rossi Street
 3. Add a southbound right turn lane on North Davis Road
 4. Add a northbound right turn overlap signal phase on North Davis Road.
- Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of these improvements, in conjunction with the West Rossi Street extension to Boronda Road. The project would be responsible for preserving the necessary right-of-way for these improvements where implementation would occur along the project frontage.

3. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183):

The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

Intersection 11 – Davis Road / Blanco Road:

The level of service under AM and PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and four trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

6. Intersection 12 – North Main Street / Alvin Drive:

The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

7. Intersection 13 – North Main Street / Laurel Drive:

The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The H2A project could have a beneficial (mitigative) effect at this intersection. The project would not be responsible for any improvements at this intersection.

9.2.2 Pedestrian Circulation

Pedestrian activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Cumulative Plus Project conditions.

9.2.3 Bicycle Circulation

Bicycle activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Cumulative Plus Project conditions.

9.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly under Cumulative Plus Project conditions. As such, the Project would not represent a significant cumulative impact to transit circulation.

10 CUMULATIVE PLUS PROJECT CONDITIONS – APARTMENTS

This section describes the analysis results under Cumulative Plus Project traffic conditions, which combines the Cumulative Without Project volumes with trips from the Project Alternative 2.

10.1 Derivation of Cumulative Plus Project Condition Traffic Volumes – Apartments

The Project trip assignment for the apartments (**Exhibit 10**) was added to the Cumulative Without Project volumes (**Exhibit 15**) to create the Cumulative Plus Project – Apartments traffic volumes depicted on **Exhibit 17**.

Note: The Rossi Street Extension is not anticipated to modify the project trip assignment.

10.2 Cumulative Plus Project Traffic Conditions – Apartments

10.2.1 Intersection Operations

Cumulative Plus Project – Apartments intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Plus Project – Apartments traffic conditions can be found in **Appendix O**.

Most of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project – Apartments conditions. However, the following nine intersections would operate below their standards. These are the same as Cumulative Plus Project with the addition of Intersection 4 – North Davis Road / Calle del Adobe – West Laurel Drive.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
3. Intersection 7 – North Davis Road / West Rossi Street – LOS E (AM) and LOS F (PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
6. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM)
7. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
8. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
9. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:

The level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 1.6 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Optimize the current intersection signal timing.
- Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical signal operations management.

2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 7 – North Davis Road / West Rossi Street:

The level of service under would be LOS E (AM) and LOS F (PM), compared to LOS D (AM) and LOS F (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following, which are the same improvements as previously recommended under Cumulative Plus Project – Ag Housing conditions:
 1. Add a second eastbound left turn lane on West Rossi Street
 2. Add an eastbound right turn lane on West Rossi Street
 3. Add a southbound right turn lane on North Davis Road
 4. Add a northbound right turn overlap signal phase on North Davis Road.
- Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of these improvements, in conjunction with the West Rossi Street extension to Boronda Road. The project would be responsible for preserving the necessary right-of-way for these improvements where implementation would occur on the project site or project frontage.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS D (AM and PM).
- Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.

8. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183):

The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
- Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical signal operations management.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

The level of service under PM conditions would be LOS E, compared to LOS E without the Project. The Project would add 1.9 seconds of delay. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Add an eastbound right turn lane on West Market Street. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
- Responsibility for Improvement: The Project should implement this improvement.

6. Intersection 11 – Davis Road / Blanco Road:

The level of service under AM and PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following, all of which are part of Salinas TFO Improvement 73 and are the same improvements as previously recommended under Cumulative Plus Project – Ag Housing conditions.:

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1. Add a second northbound left turn lane and a northbound right turn lane on Davis Road
 2. Add a second southbound through lane on Davis Road
 3. Add an eastbound right turn lane on Blanco Road
 4. Add a second westbound left turn lane on Blanco Road
- Operations after Implementation of Improvement: LOS E (AM) and LOS F (PM).
 - Responsibility for Improvement: Payment of Salinas TFO would constitute project's responsibility towards improvement.

7. Intersection 12 – North Main Street / Alvin Drive:

The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
- Operations after Implementation of Improvement: LOS D (AM and PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical maintenance schedule for signal operations.

8. Intersection 13 – North Main Street / Laurel Drive:

The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
 1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
- Operations after Implementation of Improvement: LOS D (AM) and LOS F (PM). LOS F would continue to be a deficient condition. Cumulative impacts with and without the Project will be significant and unavoidable.
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical maintenance schedule for signal operations.

10.2.2 Pedestrian Circulation

Pedestrian activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Cumulative Plus Project conditions.

10.2.3 Bicycle Circulation

Bicycle activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Cumulative Plus Project conditions.

10.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly under Cumulative Plus Project conditions. As such, the Project would not represent a significant cumulative impact to transit circulation.

11 SITE ACCESS AND INTERNAL CIRCULATION

This section summarizes the site access and internal circulation analysis, including Project driveway operations, based on the site plan included as **Exhibit 2**.

11.1 Vehicle Circulation

The onsite parking areas have direct access to the West Rossi Street extension. All project site traffic would travel on the Rossi Street Extension, which is the future west leg of the North Davis Road / West Rossi Street intersection. This intersection will operate acceptably through Background Plus Project conditions with the improvements previously described in Section 3.3 of this report. It will continue to operate acceptably through Cumulative Plus Project conditions with the following lane configuration..

1. NB Davis: 2 lefts, 2 throughs, 1 right with a right turn overlap
2. SB Davis: 1 left, 2 throughs, 1 right
3. EB Rossi: 2 lefts, 1 through, 1 right
4. WB Rossi: 2 lefts, 1 through, 1 right

The project driveways on the West Rossi Street extension will all operate acceptably through Background Plus Project conditions. This is primarily due to the low cross traffic on West Rossi Street without the full westward extension of this roadway to Boronda Road.

Under Cumulative Plus Project conditions, the two eastbound Rossi Street left turns at Davis Road will each require approximately 425 feet of storage length. The westbound left turn lane into the driveway serving the south half of the project should be a minimum of 100 feet in length. There will also be a 90-foot bay taper in the median between the eastbound left turn lane at Davis Road and the westbound left turn lane serving the project driveway. A total clear distance of about 615 feet should therefore be provided between the project driveway and Davis Road.

Driveways between the westerly main driveways should ultimately be limited to right turns in and out.

The bus loading area should accommodate bus geometrics, such as wide bus turning movements, and have a pavement section that can accommodate regular bus travel.

11.2 Pedestrian Circulation

A meandering trail is proposed along the North Davis Road frontage of the project site. This trail would be located within a 50-foot setback of the street. It would also connect to the existing sidewalk on North Davis Road north of the project site. This trail will provide good connectivity for pedestrians between the project site and the surrounding area. It is assumed that driveways will be provided within the Project and along Rossi Street to connect with the trail along the west side of North Davis Road.

11.3 Bicycle Circulation

It is recommended that on-site bicycle racks or other storage facilities be provided, per City of Salinas standards.

12 VEHICLE MILES TRAVELED

This section summarizes the calculation of the total vehicle miles traveled by Project traffic.

Vehicle Miles Traveled (VMT) represents the total number of miles traveled per weekday by all vehicles while traveling to and from a Project site. VMT has been quantified for both project alternatives.

12.1 Ag Housing VMT

Exhibit 18A summarizes the total Vehicle Miles Traveled (VMT) for the ag employee housing project alternative. This alternative would house up to 1,200 workers. These are to be comprised of H-2A Visa farmworkers. They will be transported to and from a variety of agricultural fields throughout the Salinas Valley by buses and vanpools. The buses will have a seating capacity of 32 people per bus and the vans will have a seating capacity of 15 people per van. This would result in approximately 33 round-trip bus trips and 8 round-trip van trips, or 82 trips per day when shuttling employees to and from the fields. Assuming an average of 15 miles each way, a total of about 1,230 vehicle-miles-travelled (VMT) will be generated per day.

The buses would be stored at a location 6 miles away from the project site, adding an additional 66 daily trips to and from the site. The vans would be stored on the project site and would not generate additional trips beyond employee transportation. The buses will generate an estimated 400 VMT per day between the storage yard and project site. The total VMT for the ag employee housing project alternative will be about 1,630 miles per day.

By comparison, if these workers traveled by car to and from home and the work location, they would generate a much higher VMT. Assuming two persons per vehicle, 600 cars must travel between home and work, which is a total of 18,000 VMT each day.

The agricultural season, as estimated by the project applicant, spans about eight-and-a-half months, with a six-day work week, or roughly 200 days. The proposed project will annually generate about 326,000 VMT per year compared to 3,600,000 VMT per year if the employees drove themselves. The proposed project will save 3,274,000 VMT annually, with corresponding reductions in congestion, emissions and fuel consumption. There will also be reduced congestion and a lower risk exposure for vehicle collisions.

12.2 Apartment VMT

Exhibit 18B summarizes the total Vehicle Miles Traveled (VMT) for the apartment project alternative. The VMT was calculated using the project trip generation and project trip distribution, as well as the approximate distances between the project site and the destinations of the residents traveling to and from the project site. These distances and the percentage of project trips traveling to/from those locations are also shown on **Exhibit 18B**.

Per the publication *Technical Advisory on Evaluating Transportation Impacts in CEQA*, State of California Governor's Office of Planning and Research, December 2018, VMT for apartments is measured in VMT per resident. The project would have an estimated VMT of 16.5 miles per resident. The project average trip length would be approximately 8.4 miles, slightly lower than

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the regional average of 8.9 miles, per 2017 California Emissions Estimator Model (CalEEMod) data. Quantification of the regional average trip length can be found in **Appendix P**.

13 SUMMARY OF PROJECT RESPONSIBILITIES

The following is a summary of the Project responsibilities regarding traffic issues and impacts, based upon the recommendations discussed earlier in this report.

It is important to note that the H2A project will reduce trips by replacing existing private automobile trips with bus trips at a much higher vehicle occupancy. The H2A project will also operate only 8 and a half months per year. It will have virtually no impacts during winter months. The analysis does not give credit for these unique project characteristics. The analysis assumes much more conservative Project peak hour trip generation rates identical to the recently constructed Casa Boronda H2A project. The work schedule anticipated by Project representatives would result in almost no project trips generated during street peak hours. Even with the conservative assumptions the H2A project alternative would result in de minimus impacts.

The potential future conversion of the Project to standard apartments is assumed to result in standard apartment trip generation rates. Travel demand management strategies cannot be implemented for this Project alternative.

1. Pay the TAMC Regional Development Impact Fee and the City of Salinas Traffic Fee Ordinance fee. Monterey County and City of Salinas staff will quantify the applicable fees to the Project at the time of development. The fees applicable to each project alternative will vary; hence, conversion of ag employee housing to apartments will require payment of additional fees.
2. Pay the County of Monterey Traffic Impact Fee, if adopted prior to approval of the Project by Monterey County. Monterey County staff will quantify the applicable fee to the Project at the time of development. The Project will not be responsible for the payment of a fee if one is not in place at the time of Project approval.
3. Implement the following at the North Davis Road / Rossi Street intersection for both project alternatives. These are required to add the west leg of Rossi Street.
 - i. Modify the existing northbound Davis Road median to provide a northbound left turn lane.
 - ii. Modify the east leg of Rossi Street to provide a westbound through lane.
 - iii. Add west leg as a part of the Rossi Street extension that will include one eastbound left turn lane and a through/right lane.
 - iv. Modify the existing traffic signal.
 - v. Preserve right-of-way on project site and project frontage for future improvements at the North Davis Road / West Rossi Street intersection to be made by the City of Salinas as part of the West Rossi Street extension to Blanco Road. These include the following.
 1. NB Davis: 2 lefts, 2 throughs, 1 right with a right turn overlap
 2. SB Davis: 1 left, 2 throughs, 1 right
 3. EB Rossi: 2 lefts, 1 through, 1 right
 4. WB Rossi: 2 lefts, 1 through, 1 right

Quattrin Ranch Traffic Impact Analysis

4. Implement the following improvements with the conversion of the project site to standard apartments. These are not required for the H2A project alternative.
 - a. Add an eastbound right turn lane on West Market Street (State Route 183) at the Davis Road northbound ramps.
 - b. Implement the following for the North Davis Road / Calle Del Adobe – West Laurel Drive intersection:
 - i. Pay the Salinas TFO AND optimize the signal timing at this intersection. Payment of the TFO constitutes the project's contribution towards the construction of the Western Bypass (TFO Project 26).
 - c. Implement the following for the North Davis Road / Post Drive – Commercial Driveway intersection:
 - i. Pay the Salinas TFO, which constitutes the project's contribution towards the construction of the Western Bypass.
5. The bus loading area should accommodate bus geometrics, such as wide bus turning movements, and have a pavement section that can accommodate regular bus travel.
6. Provide sidewalks or walkways on the project site that connect the project buildings to West Rossi Street, the proposed trail that will extend from the existing sidewalk near Boronda Meadows Elementary School along the entire project frontage.
7. The site plan does not indicate locations for bicycle racks or other storage facilities. It is recommended that these facilities be provided, per City of Salinas standards.

14 REFERENCES

14.1 List of References

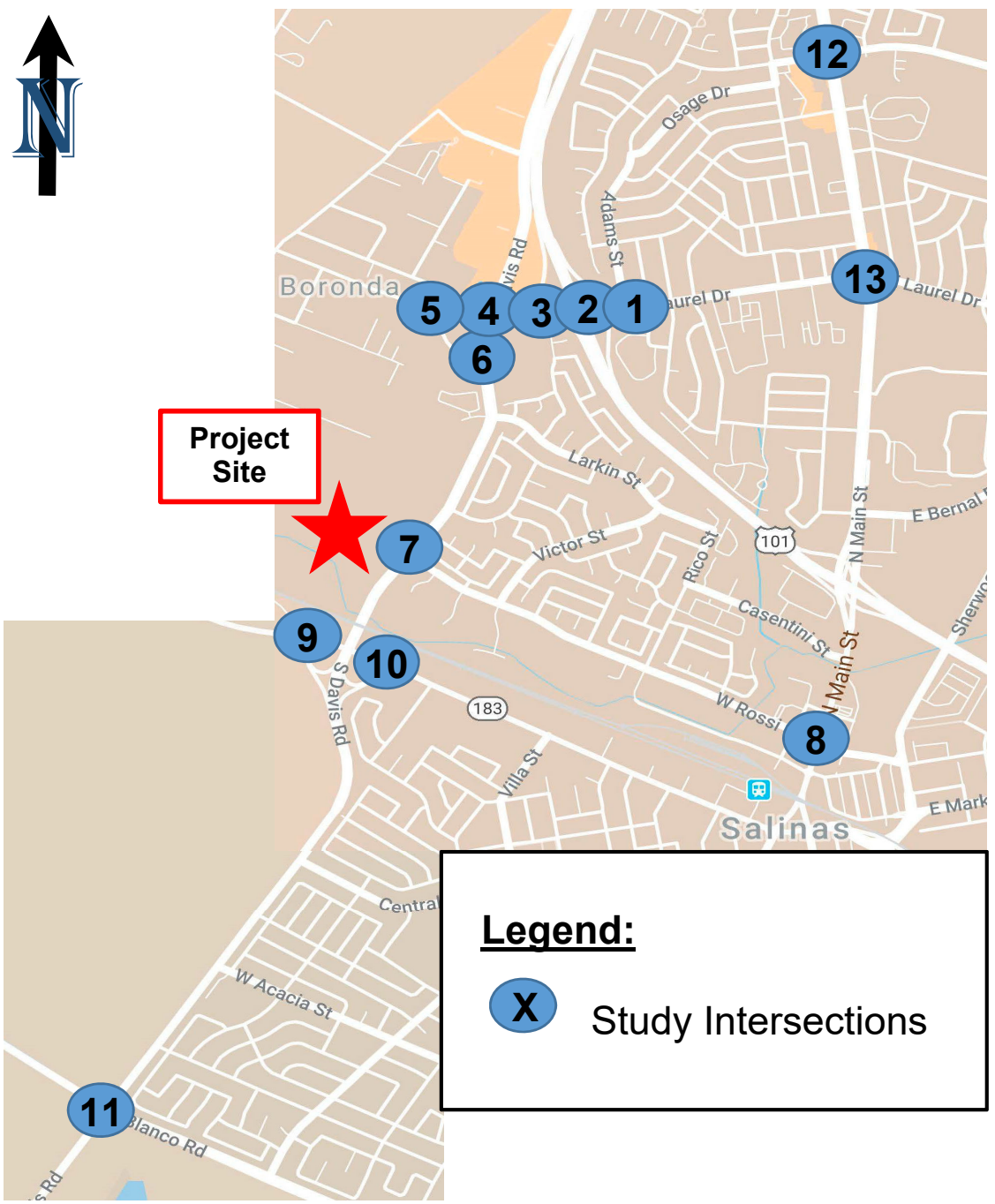
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Quattrin Ranch Traffic Impact Analysis

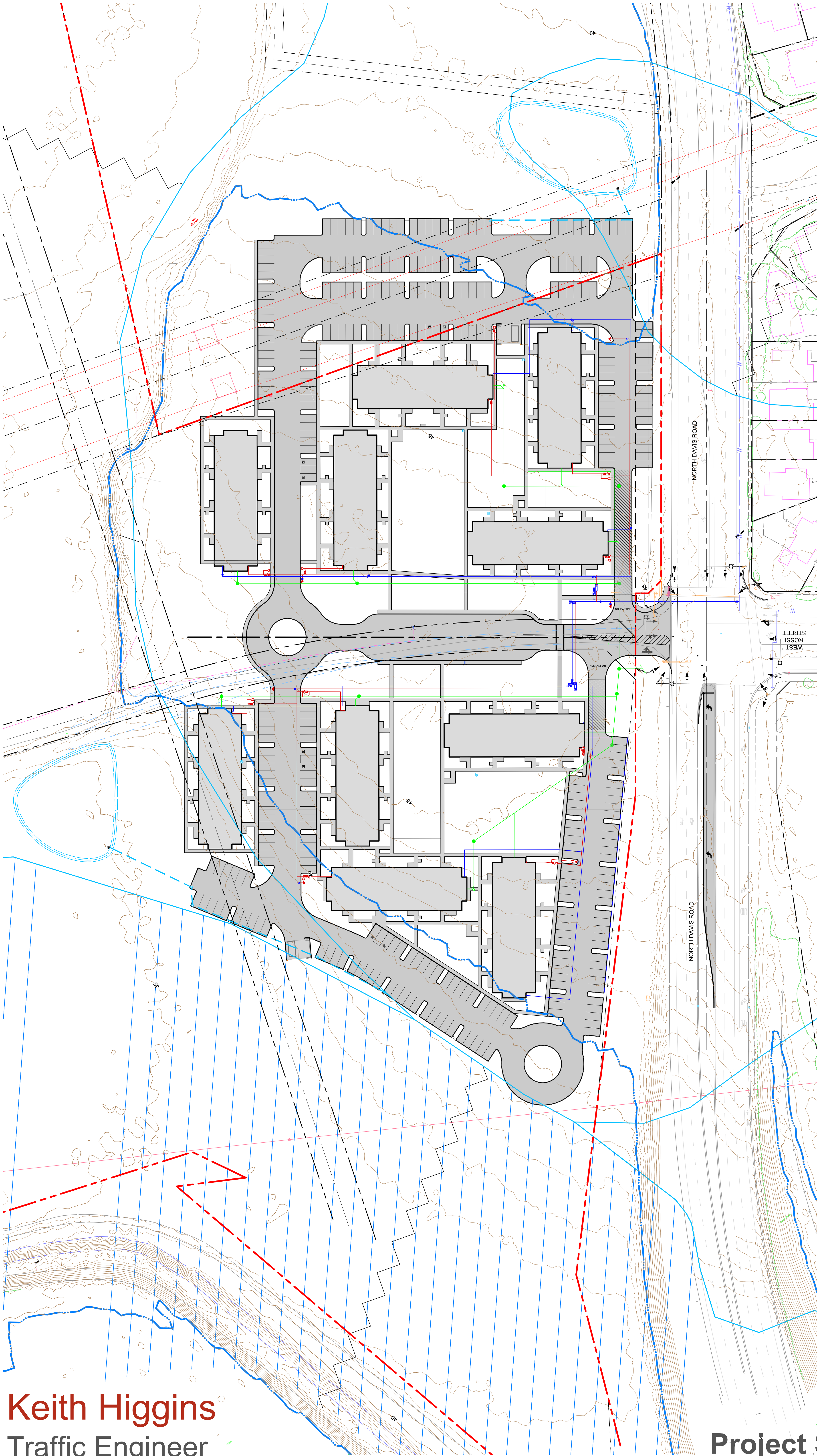
20. *Technical Advisory on Evaluating Transportation Impacts in CEQA*, State of California Governor's Office of Planning and Research, December 2018

14.2 List of Contacts

1. Vic Montgomery and Tim Walters, RRM Design Group, San Luis Obispo, California.
2. Andrew Easterling, City of Salinas Traffic Engineer, Salinas, California.



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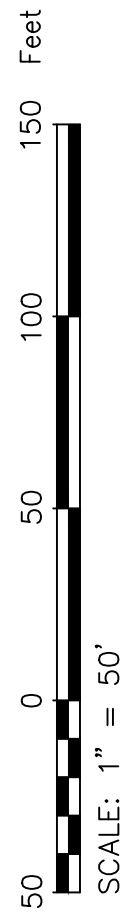


CIVIL SITE PLAN

HARVEST MOON AGRICULTURAL EMPLOYEE HOUSING PROJECT

SALINAS, CALIFORNIA

Exhibit 2
Project Site Plan



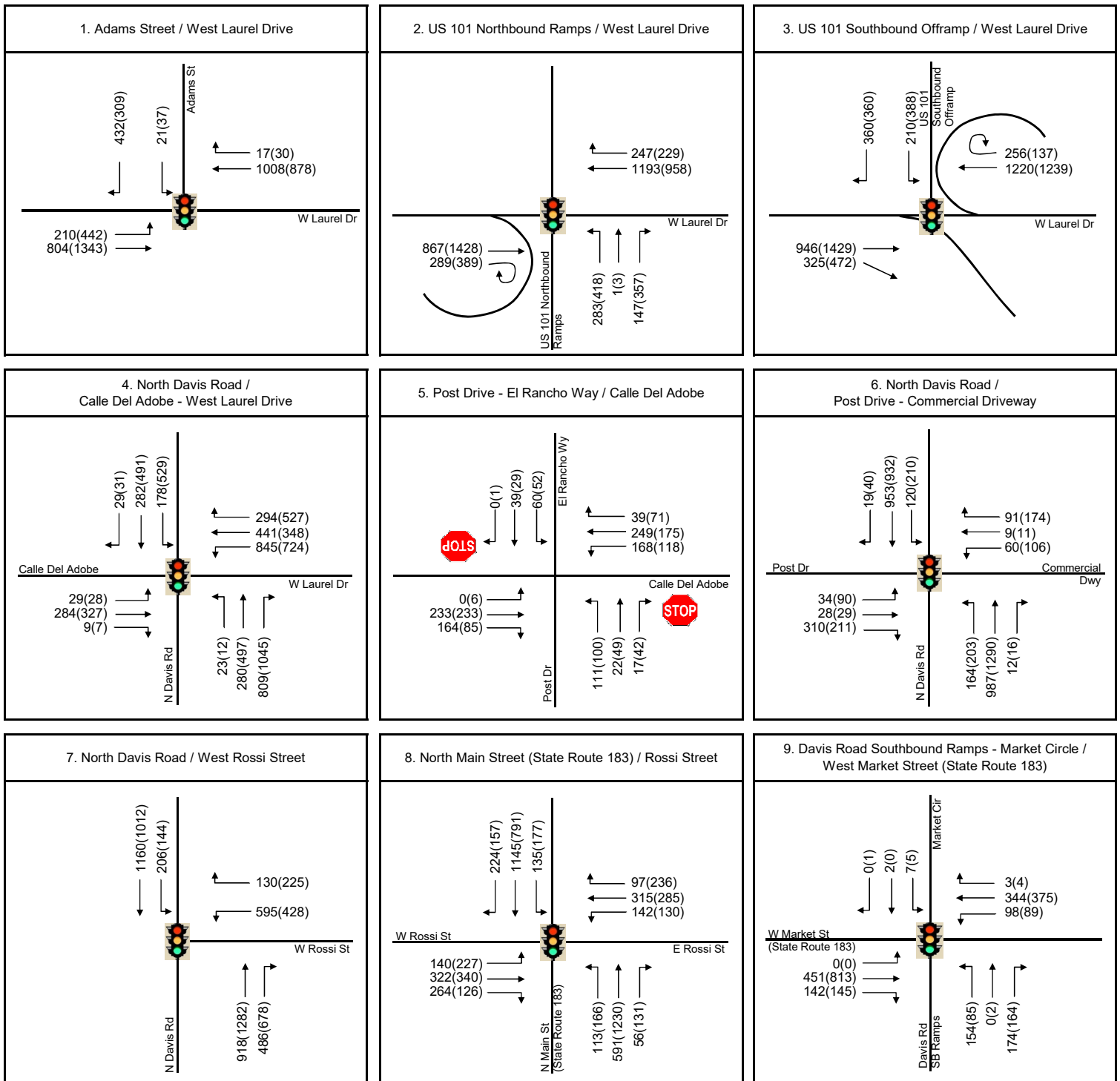
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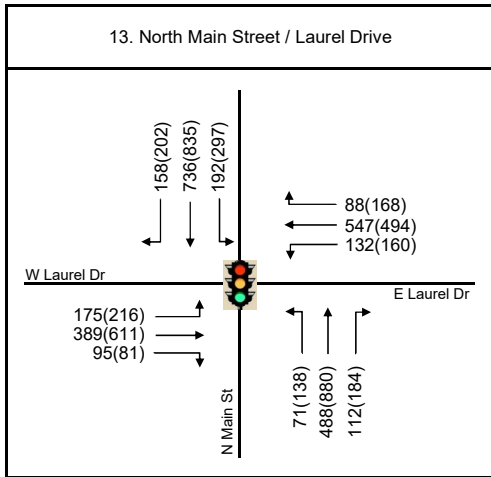
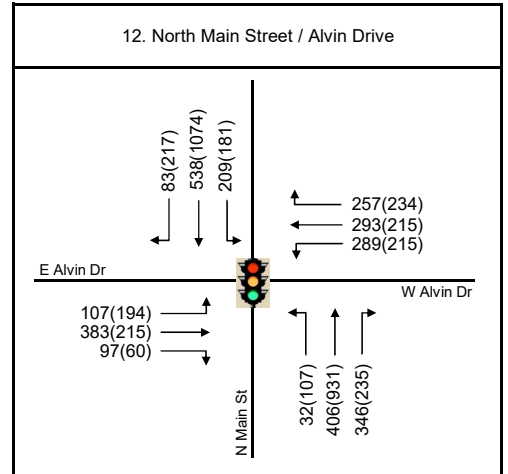
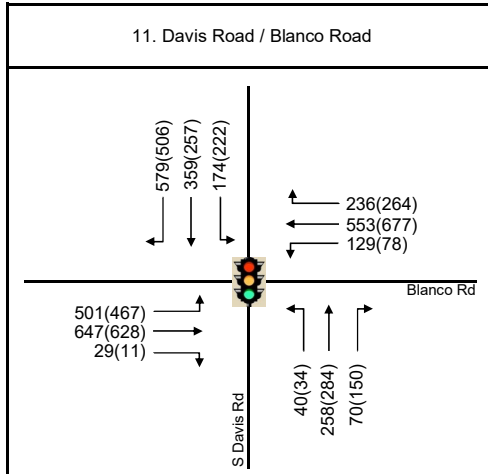
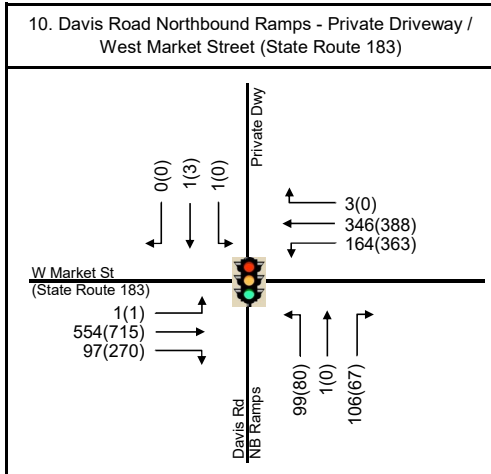


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N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apt) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apt) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apt) Conditions			
							Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Adams Street	City of Salinas	SB 1-L, 1-R EB 1-L, 2-T WB 1-T, 1-T/R	Signal	D	AM PM	16.6	B	16.7	B	22.6	C	22.7	C	22.9	C	47.7	D	47.7	D	47.7	D	47.7	D		
							15.2	B	15.5	B	22.0	C	22.3	C	22.5	C	21.3	C	21.6	C	21.8	C				
2	US 101 Northbound Ramps	Caltrans	NB 1-L, 1-L/T, 1-R EB 2-T WB 1-T, 1-T/R	Signal	C-D	AM PM	13.9	B	14.0	B	18.0	B	17.9	B	18.0	B	28.4	C	28.4	C	28.6	C	28.6	C		
							17.9	B	18.1	B	22.1	C	22.3	C	22.5	C	20.6	C	20.7	C	20.9	C				
3	US 101 Southbound Offramp	Caltrans	SB 2-L, 1-R EB 2-T WB 2-T	Signal	C-D	AM PM	10.1	B	10.2	B	12.9	A	13.0	B	13.2	B	14.9	B	14.9	B	15.6	B	15.6	B		
							10.9	B	11.3	B	14.2	B	14.6	B	14.9	B	15.0	B	15.4	B	15.7	B				
4	N Davis Road	City of Salinas	NB 1-L, 2-T, 2-R SB 2-L, 1-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 2-L, 2-T, 1-R	Signal	D	AM PM	25.0	C	25.1	C	28.3	C	28.3	C	28.6	C	26.6	C	26.6	C	26.8	C	26.8	C		
							39.7	D	40.8	D	54.4	D	56.1	E	58.2	E	53.6	D	54.2	D	55.2	E				
				With TDM Measures																						
				With Improvement																						
5	Post Drive - El Rancho Way	Monterey County	NB 1-L, 1-T/R SB 1-L/T, 1-R EB 1-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Two-Way Stop	E/E	AM PM	77.174.7	F/F	77.174.7	F/F	176.5148.6	D/D	176.5148.6	F/F	176.5148.6	F/F	28.846.7	D/E	28.846.7	D/E	28.846.7	D/E	28.846.7	D/E		
							21.926.5	C/D	21.926.5	C/D	27.534.5	D/D	27.534.5	D/D	27.534.5	D/D	34.7172.0	D/F	34.7172.0	D/F	34.7172.0	D/F				
				With Improvement																						
				With Improvement																						
6	N Davis Road	City of Salinas	NB 1-L, 2-T, 1-T/R SB 1-L, 2-T, 1-R EB 1-L, 1-L/T, 1-R WB 1-L/T, 1-R	Signal	D	AM PM	43.4	D	43.7	D	56.0	E	56.1	E	56.7	E	47.3	D	47.4	D	47.5	D	47.5	D		
							44.3	D	44.9	D	61.2	E	62.9	E	65.1	E	37.6	D	37.9	D	38.2	D				
				With TDM Measures																						
				With Improvement																						
7	N Davis Road	City of Salinas	NB 2-T, 1-R SB 1-L, 2-T WB 2-L, 1-R	Signal	D	AM PM	17.7	B	29.8	C	22.9	C	37.2	D	38.0	D	52.2	D	52.8	D	59.0	E	59.0	E		
							22.9	C	35.3	D	34.9	C	51.7	D	51.9	D	88.8	F	94.7	F	95.7	F				
				With TDM Measures																						
				With Improvement																						
8	N Main Street (State Route 183)	Caltrans	NB 1-L, 2-T, 1-R SB 1-L, 2-T, 1-R EB 2-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Signal	C-D	AM PM	44.0	D	44.0	D	58.9	E	59.0	E	60.1	E	66.0	E	66.1	E	67.4	E	67.4	E		
							41.7	D	41.8	D	54.8	D	55.1	E	55.3	E	70.3	E	71.3	E	71.6	E				
				With TDM Measures																						
				With Improvement																						
9	Davis Road Southbound Ramps - Market Circle	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM PM	17.1	B	17.2	B	18.8	B	18.8	B	18.8	B	22.4	C	22.4	C	22.4	C	22.4	C		
							20.9	C	21.0	C	25.1	C	25.3	C	25.4	C	35.2	D	35.9	D	36.0	D				
				With TDM Measures																						
				With Improvement																						

Exhibit 4A
Intersection
Levels of Service
(Page 1 of 2)

Keith Higgins
Traffic Engineer

N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1 Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2 US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3 US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4 N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass (TFO 2b) 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5 Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6 N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EB/WB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7 N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T c. Add EB with L, 1-T/R	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8 N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9 Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

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N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
10 Davis Road Northbound Ramps	W Market Street (State Route 183)	Signal	None Required	Add EB R	None Required	Add EB R	None Required	Add EB R
11 S Davis Road	Blanco Road	Signal	None Required	None Required	None Required	None Required	None Required	a. Add 2nd NB L, NB R b. Add 2nd SB T c. Add EB R d. Add 2nd WB L (TFO 73)
12 N Main Street	Alvin Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing
13 N Main Street	Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. RTO = Right Turn Overlap Signal Phase

Exhibit 4B
Recommended
Intersection Improvements
(Page 2 of 2)

Quattrin Agricultural Employee Housing Trip Generation

PROPOSED PROJECT - AGRICULTURAL EMPLOYEE HOUSING										
A. Project Trip Rates										
REFERENCE USE	EXISTING SIZE	DAILY TRIPS	AM PEAK HOUR			PM PEAK HOUR				
			PEAK HOUR	% OF ADT	% IN	% OUT	PEAK HOUR	% OF ADT	% IN	% OUT
Casa Boronda Ag. Employee Housing Driveway Count ¹	600 beds	N.A.	4		3	1	43		22	21
Trip Rates (per employee): ²		0.288	0.007		75%	25%	0.072		51%	49%
B. Project Trip Generation										
PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR			PM PEAK HOUR				
			PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT
Agricultural Employee Housing	1,200 beds	346	8	2%	6	2	86	25%	44	42
Raw (Peak Hour) Total (used in analysis):		346	8		6	2	86		44	42
Annual Average Total:		245	6		4	2	61		31	30
With TDM Work Schedule: ⁵		49	1		1	0	12		6	6

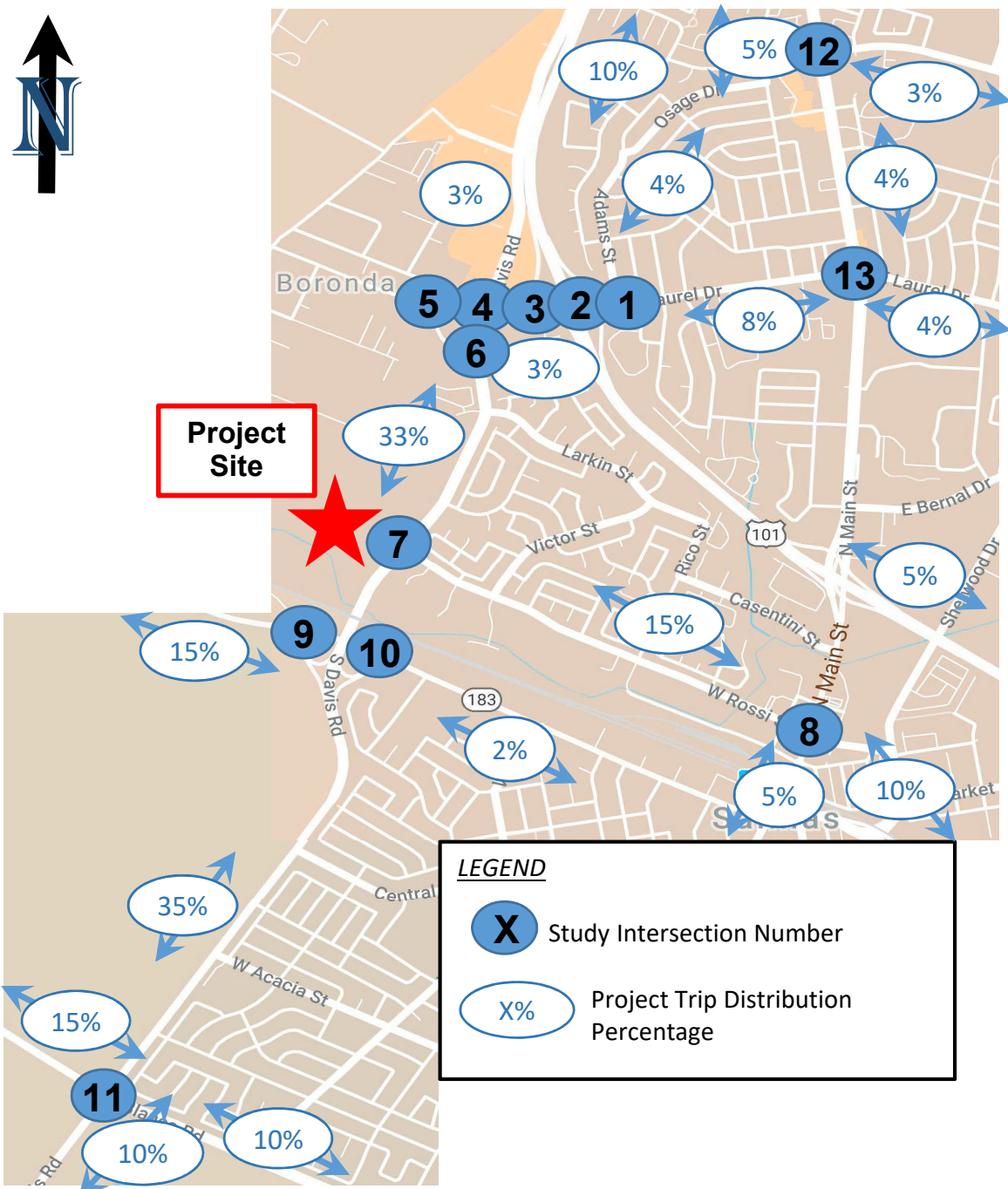
Notes:

1. AM and PM peak hour traffic at Casa Boronda was collected Tuesday, April 16, 2019. This data can be found in **Appendix C**.
2. Daily trip rate derived by assuming that PM peak rate is 25% of the daily trip rate.
3. Estimated trip generation for Casa Boronda project cited from *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis*, Keith Higgins Traffic Engineer, July 3, 2017.
4. Seasonal adjustment reflects that project is open for just 8.5 months of the year (i.e., approximately 71% of a year).
5. Project Traffic Demand Management (TDM) program proposes use of employee buses and vans largely outside of AM and PM peak hours.

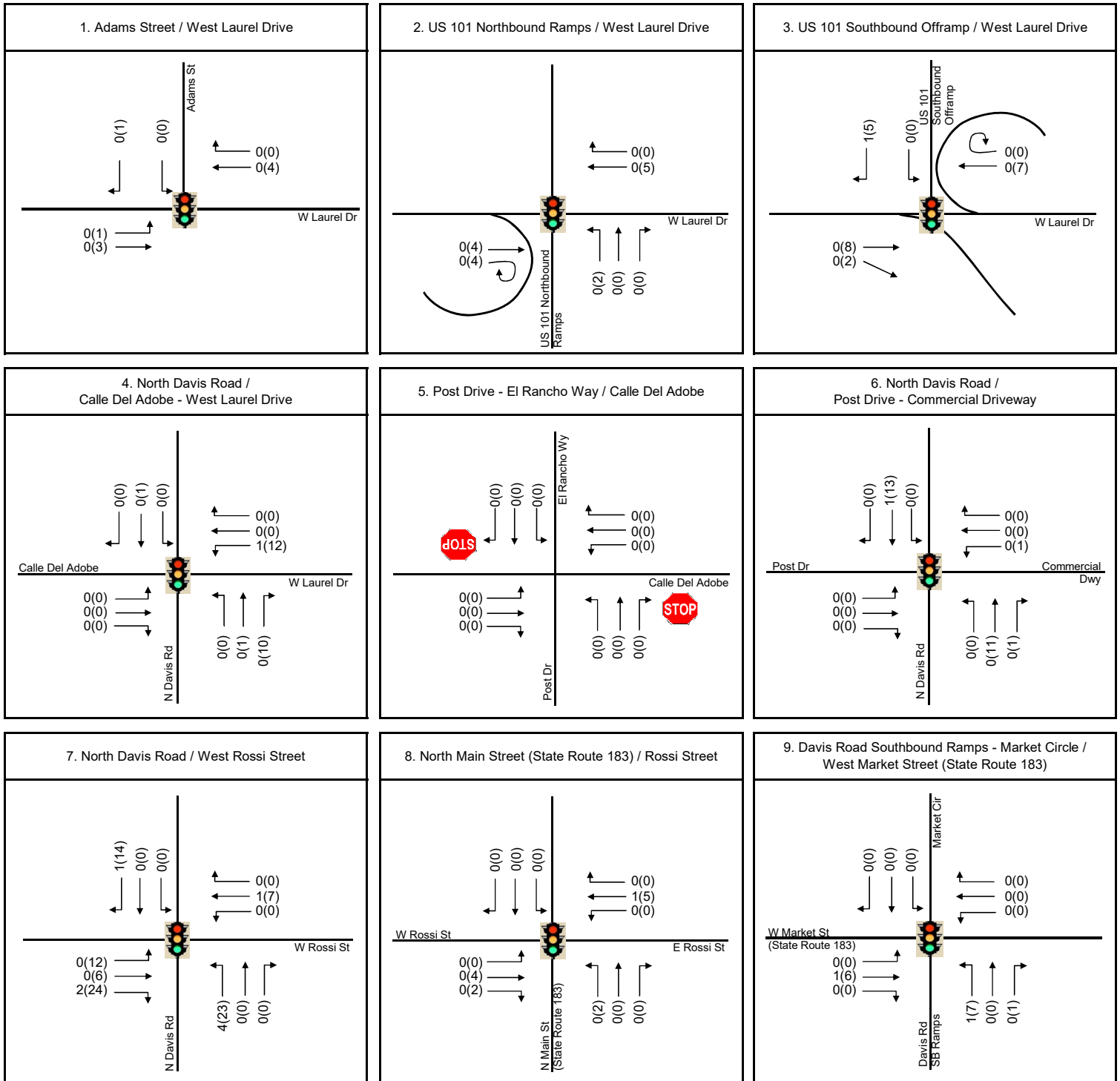
ALTERNATIVE PROPOSED PROJECT - APARTMENTS										
A. Project Trip Rates										
TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR			PM PEAK HOUR				
			PEAK HOUR	% OF ADT	% IN	% OUT	PEAK HOUR	% OF ADT	% IN	% OUT
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.56	8%	63%	37%
B. Project Trip Generation										
PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR			PM PEAK HOUR				
			PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT
Apartments	200 units	1,464	92	6%	21	71	112	8%	71	41
Total:										

Notes:

1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, 2017.
2. sq. ft. = square feet

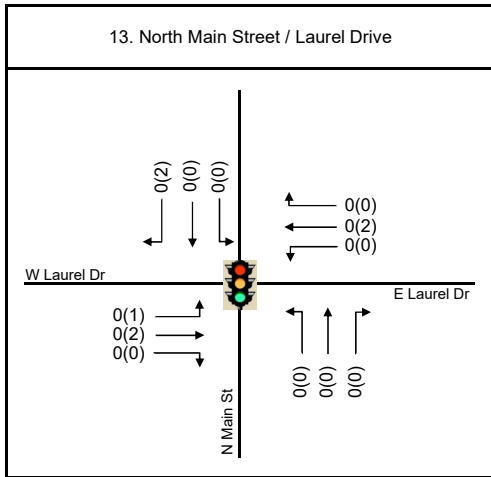
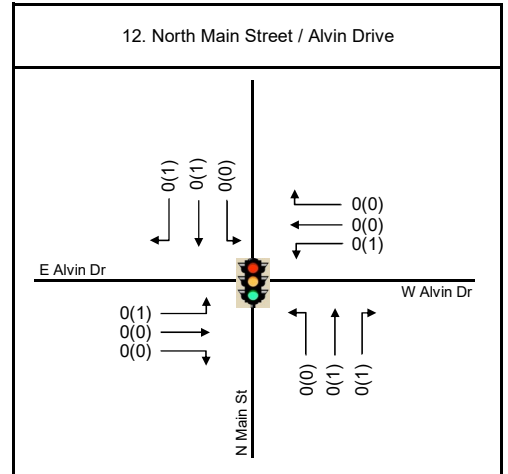
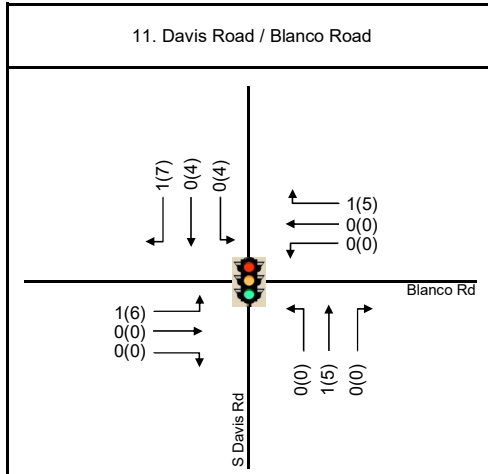
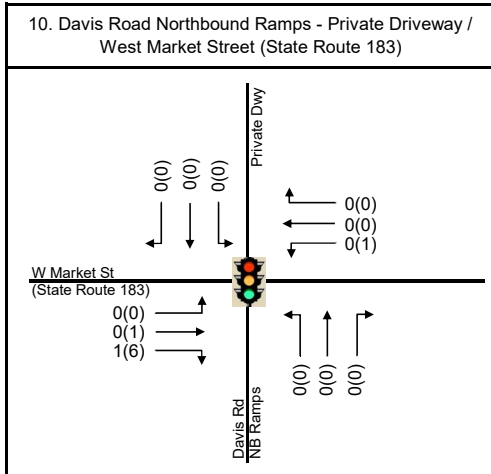


Basemap Source: Google Maps, 2019.



Keith Higgins
Traffic Engineer

Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



Keith Higgins
Traffic Engineer

Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

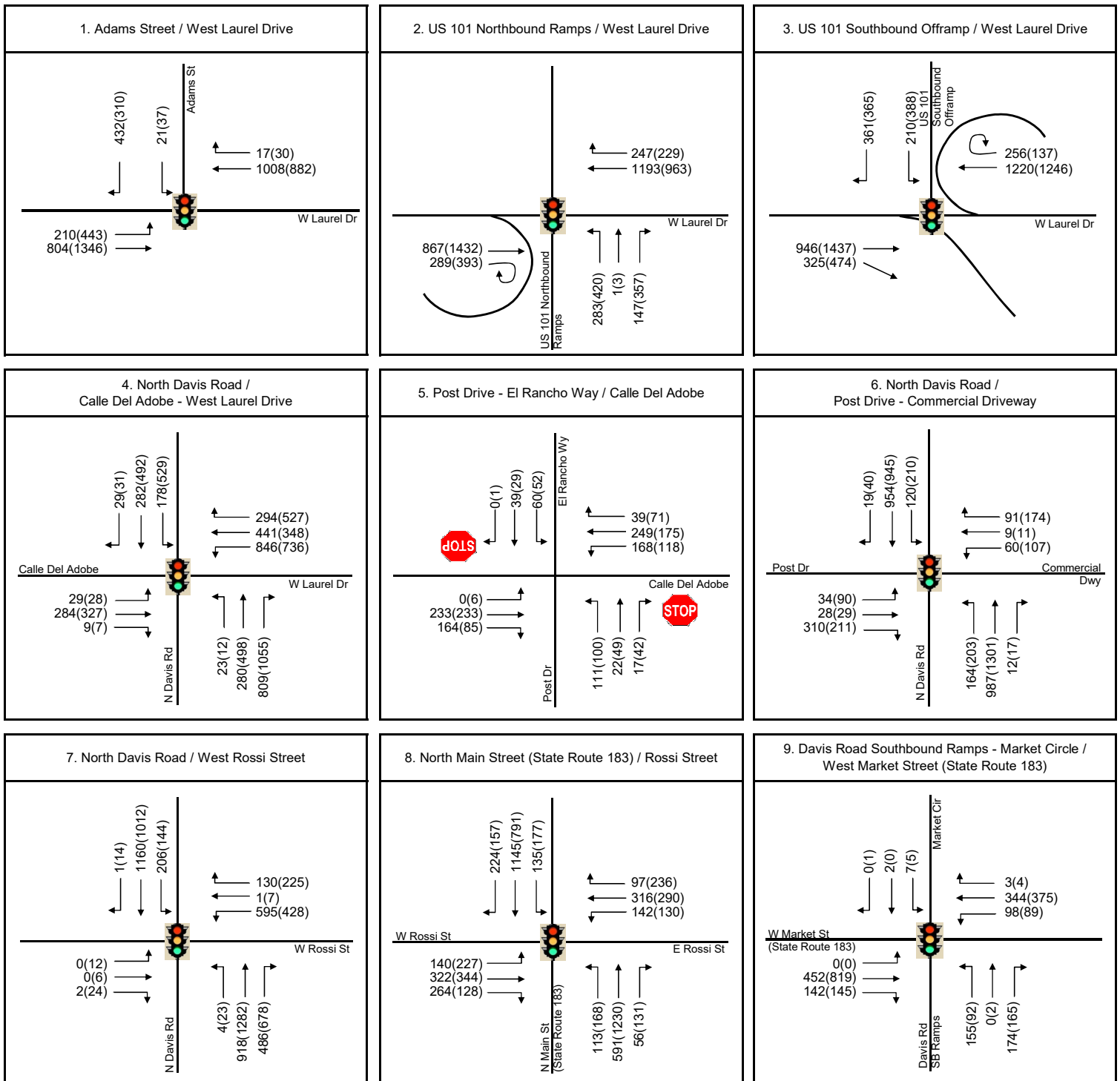


Exhibit 8

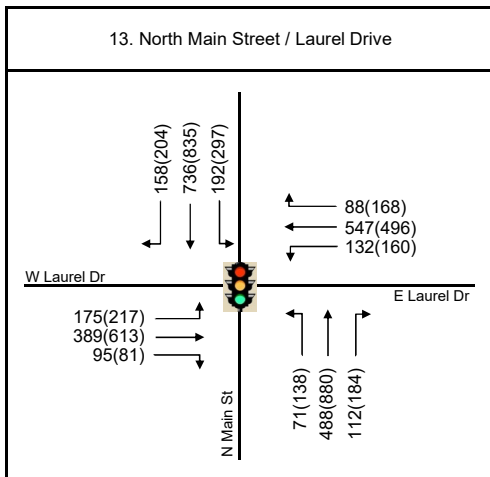
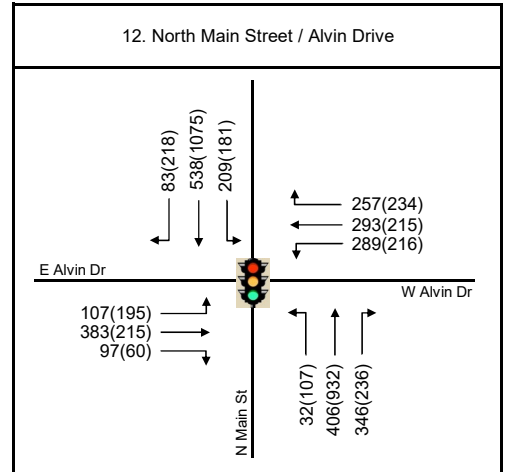
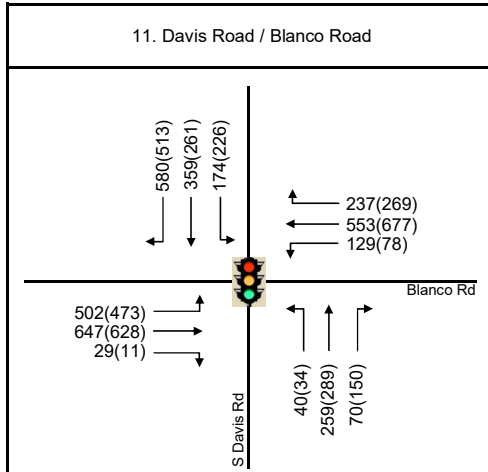
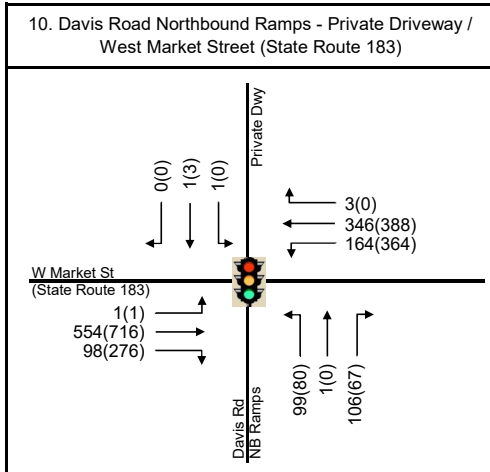
Existing Plus Project Conditions

Ag Employee Housing

AM & PM Peak Hour Volumes

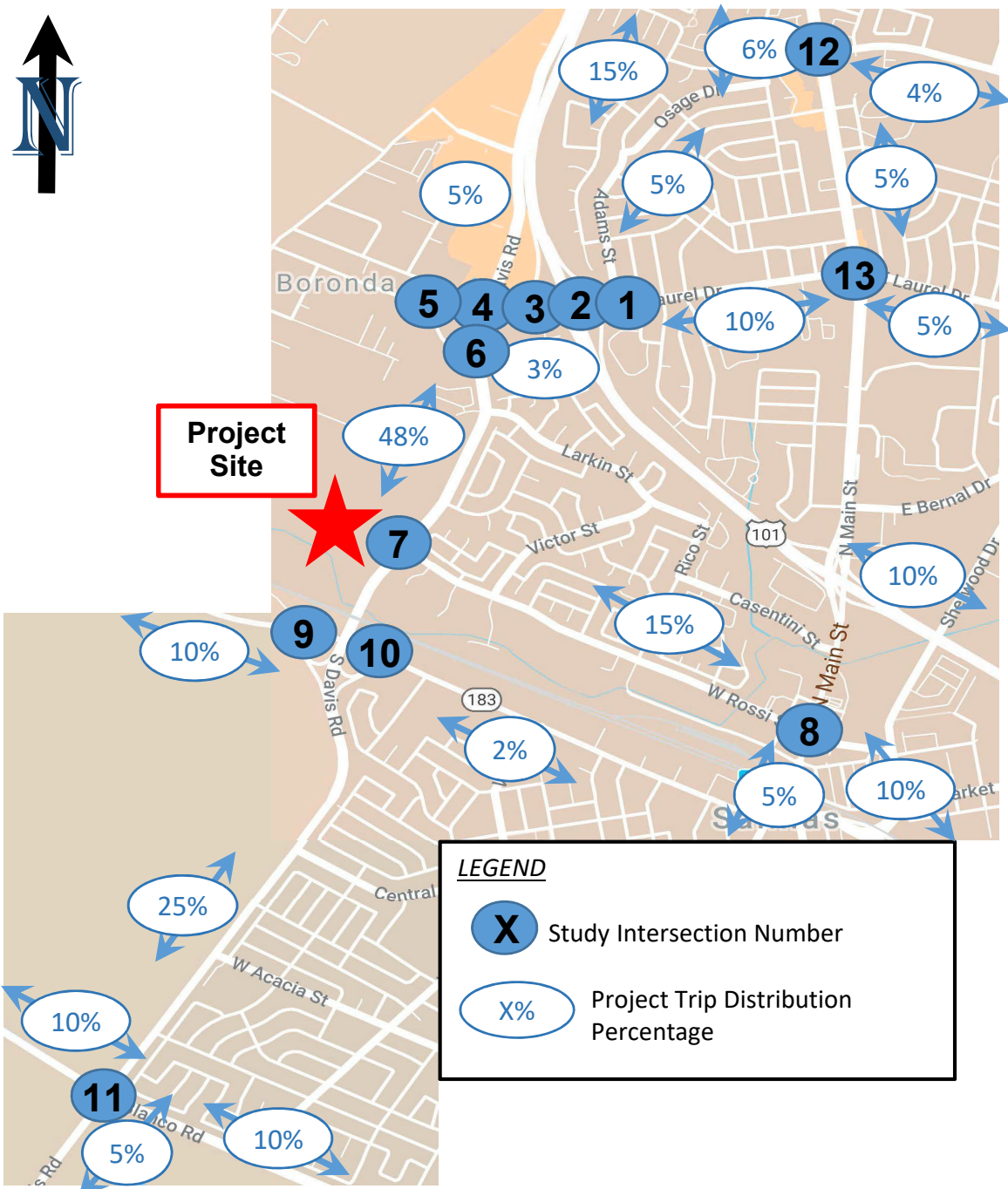
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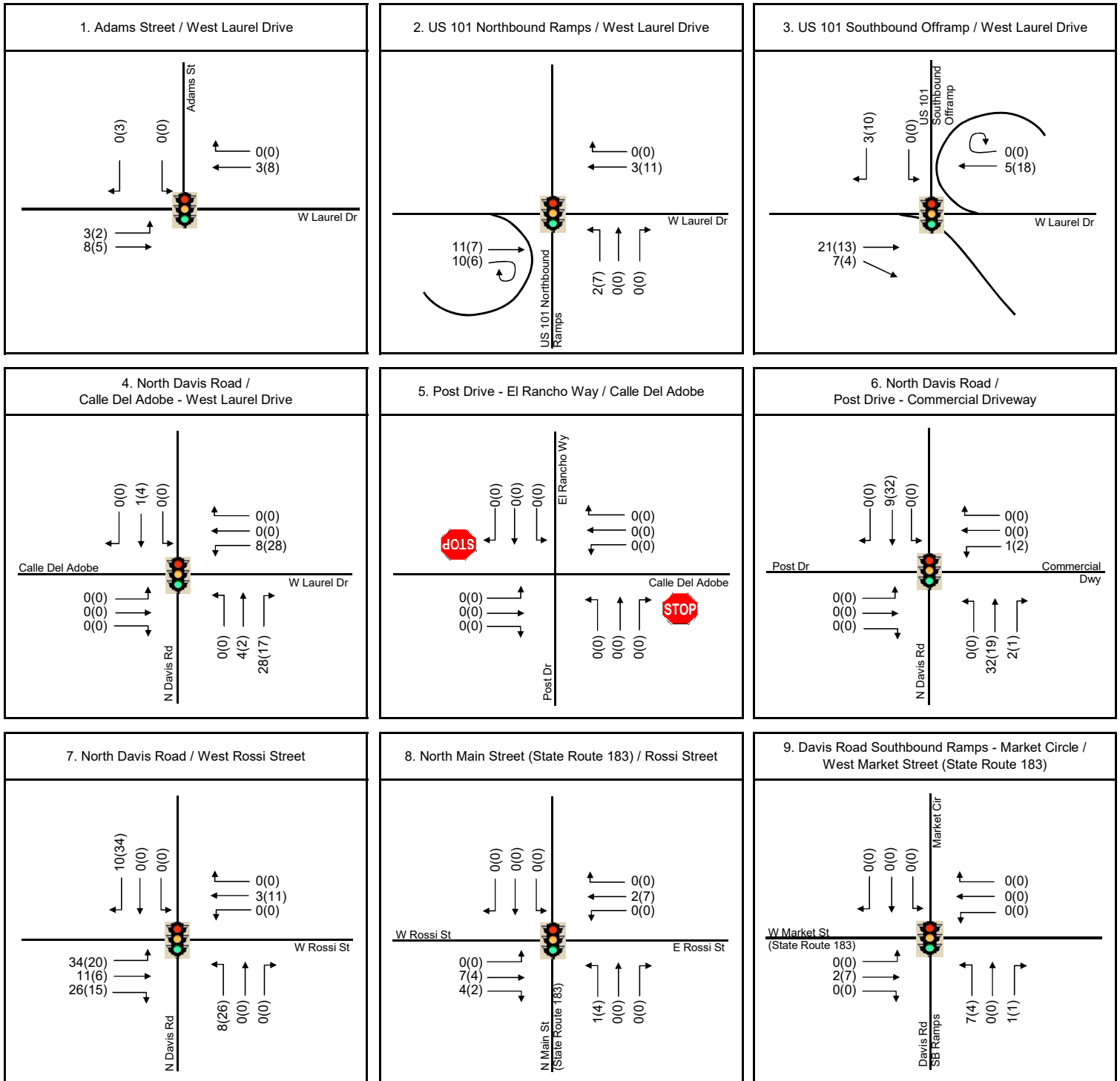
Keith Higgins
Traffic Engineer



Keith Higgins
Traffic Engineer

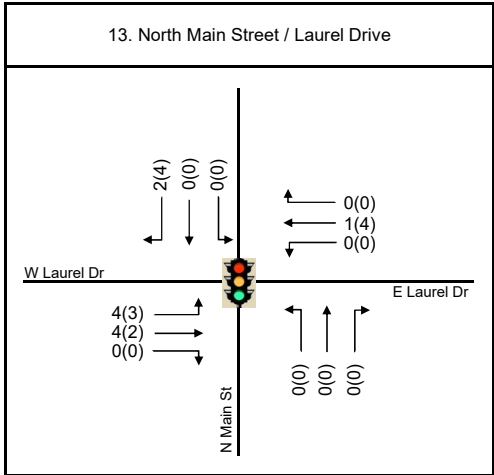
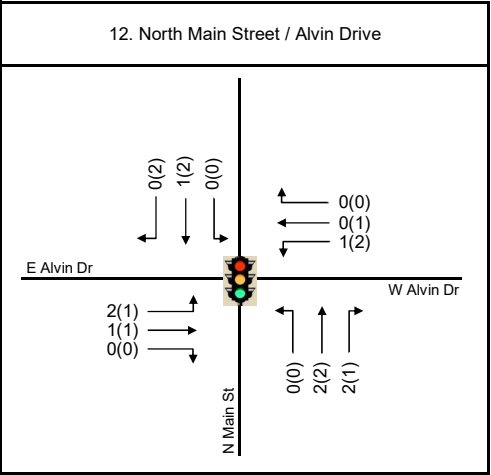
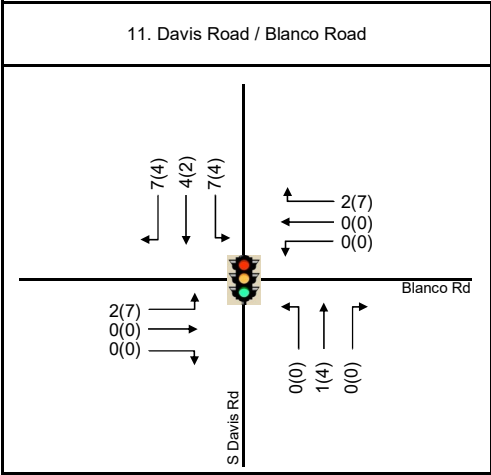
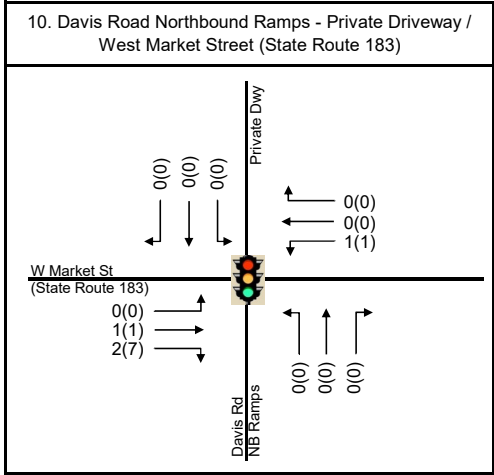
Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)



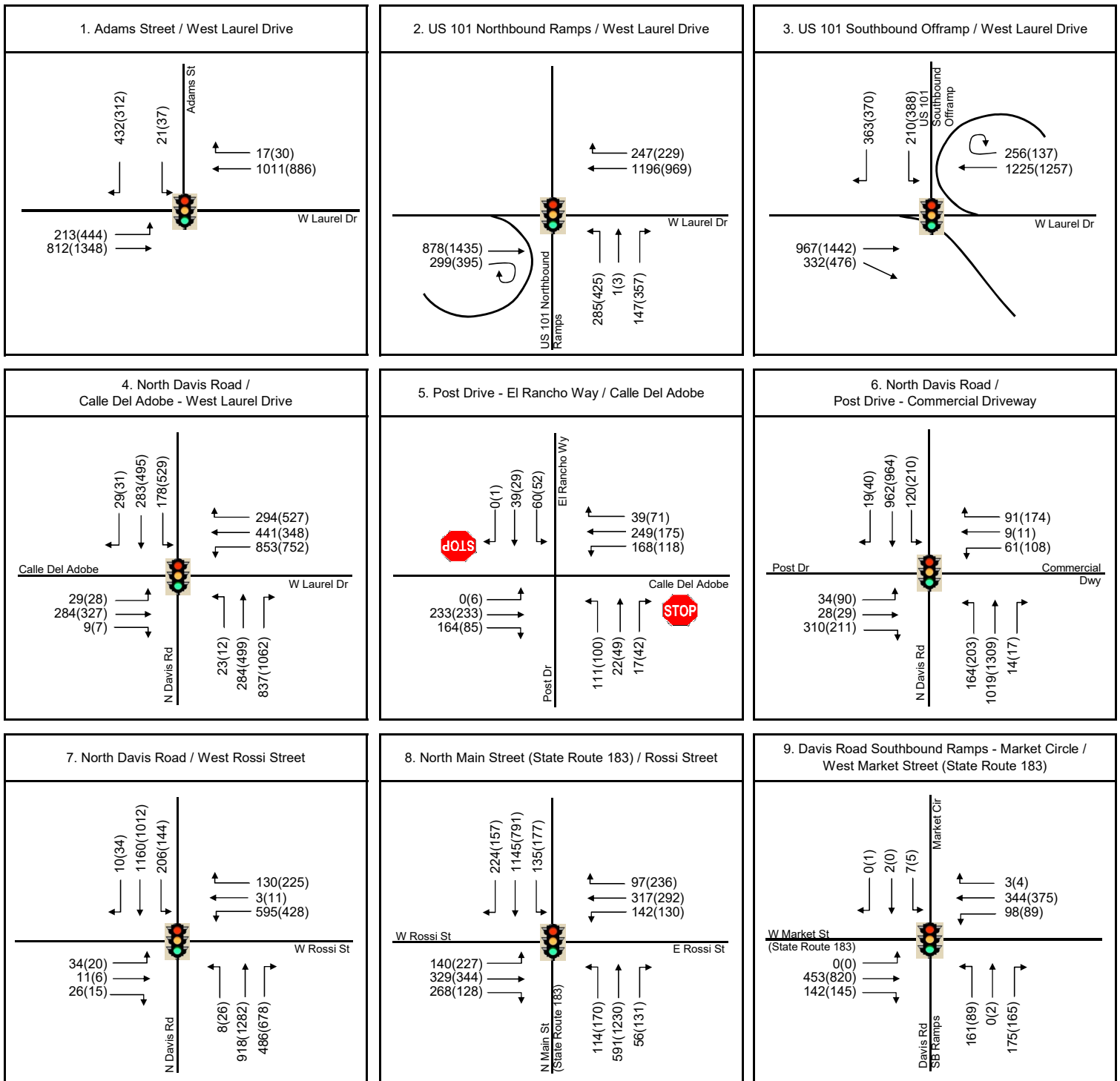


Keith Higgins
Traffic Engineer

Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

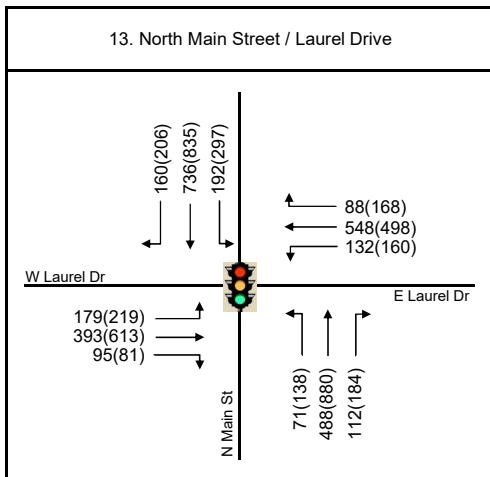
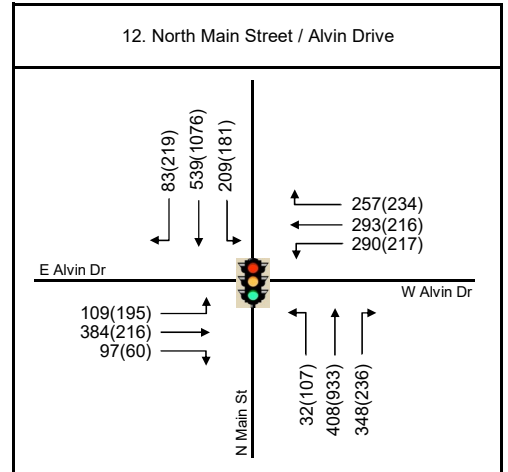
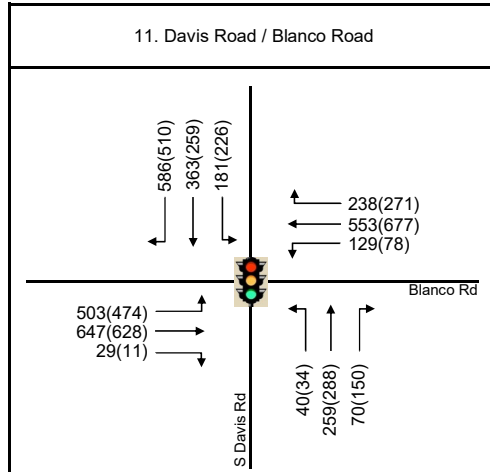
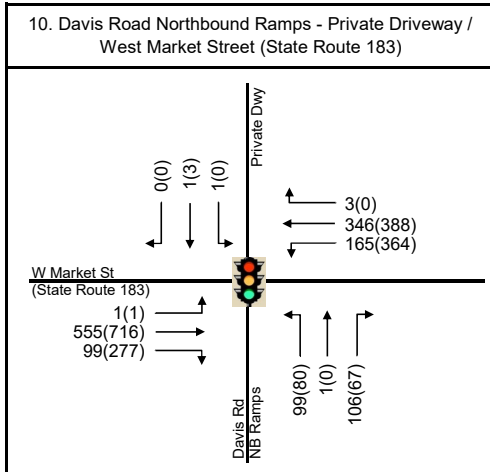


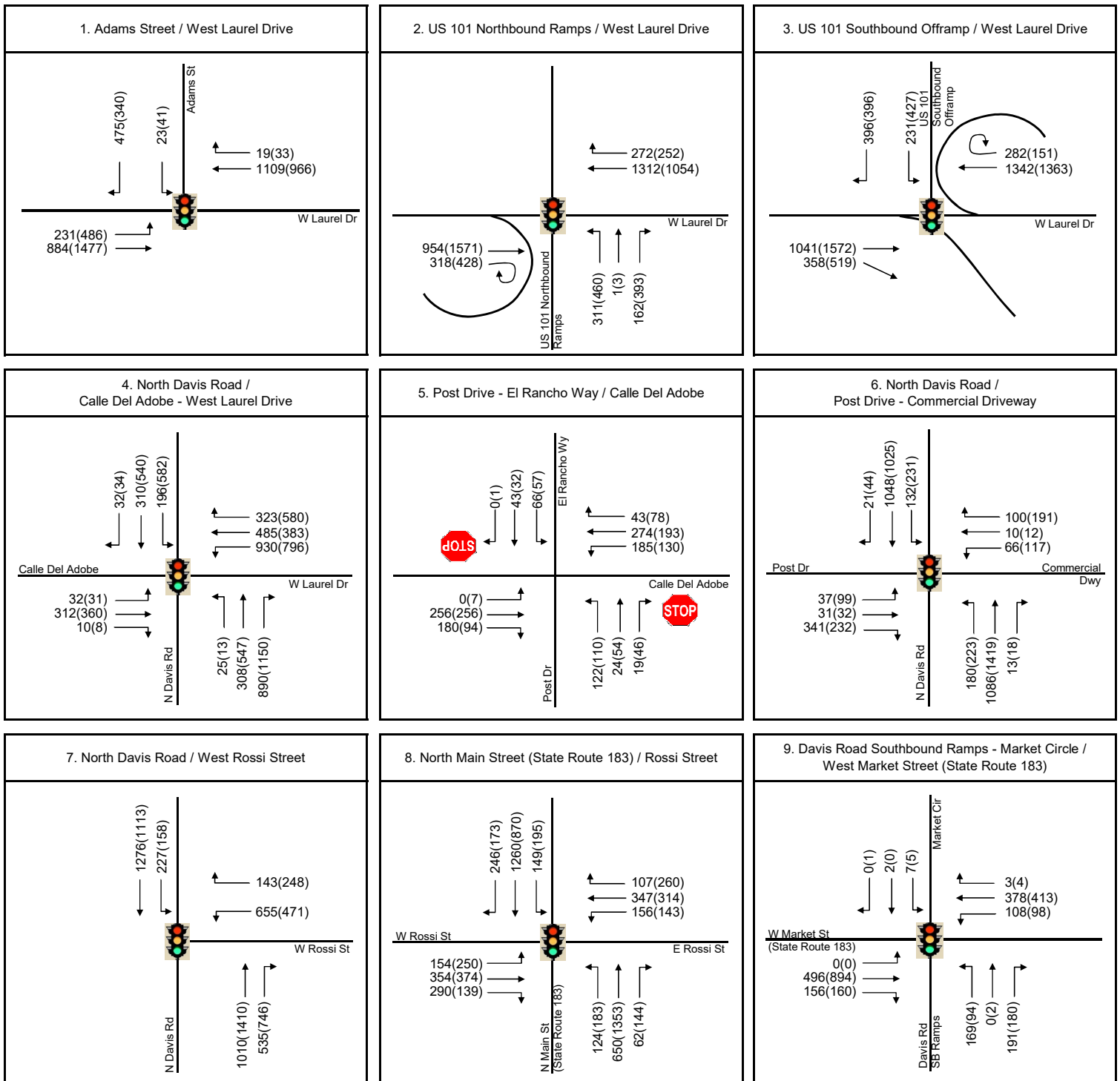
Keith Higgins
Traffic Engineer

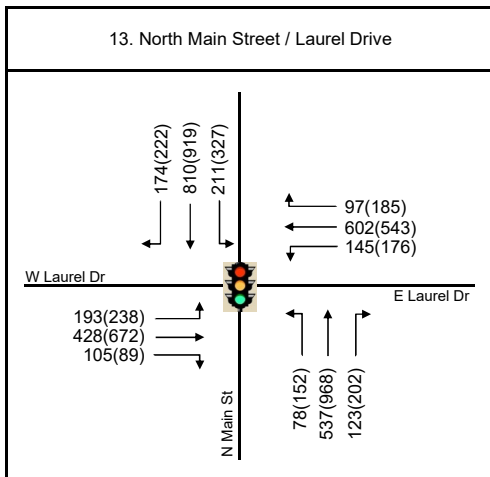
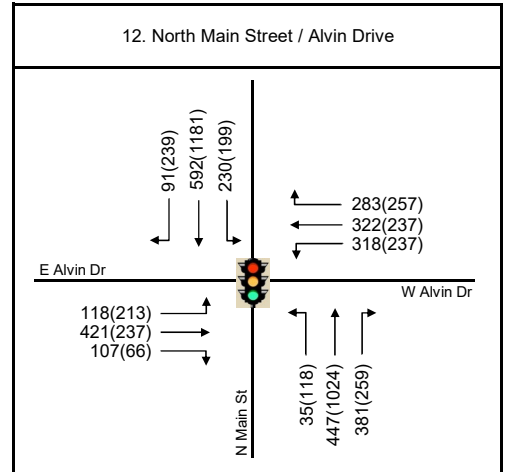
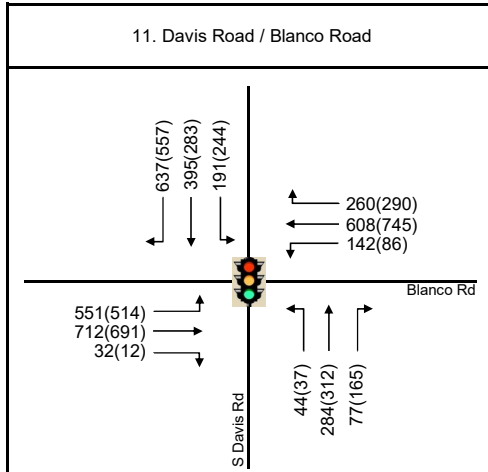
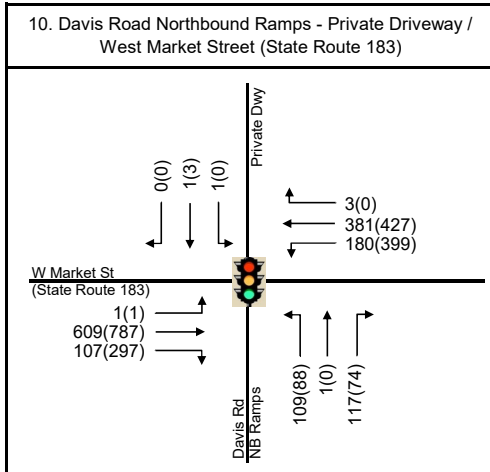


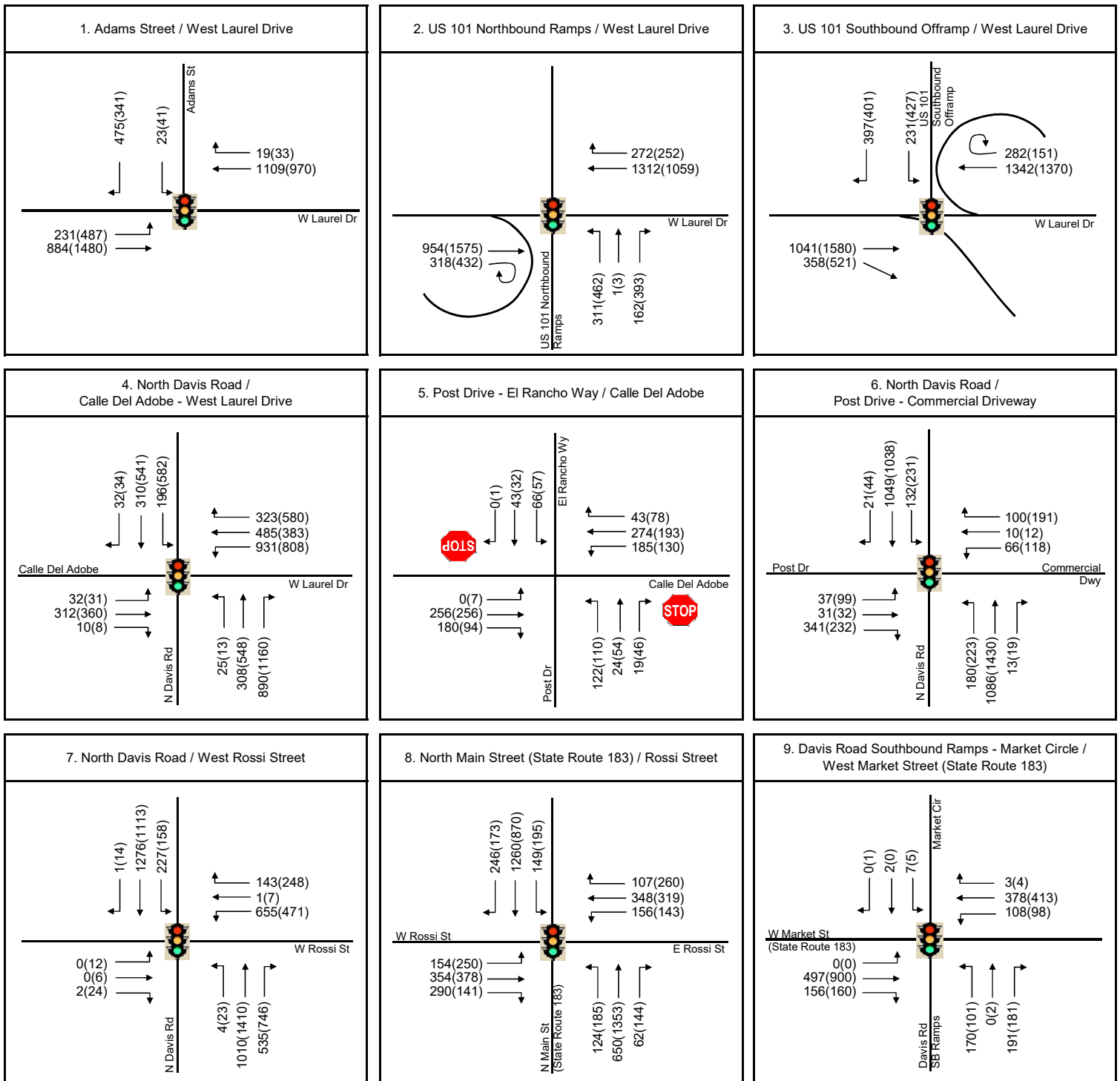
Keith Higgins
Traffic Engineer

Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



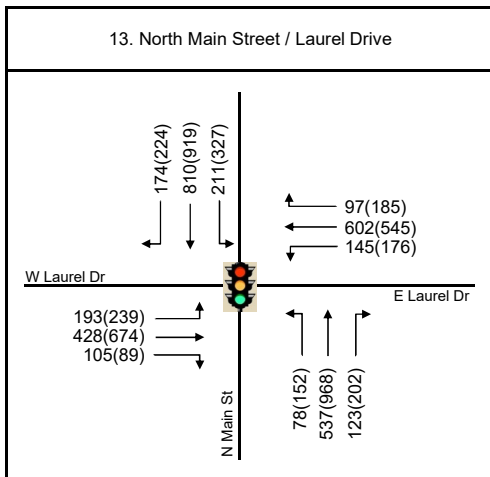
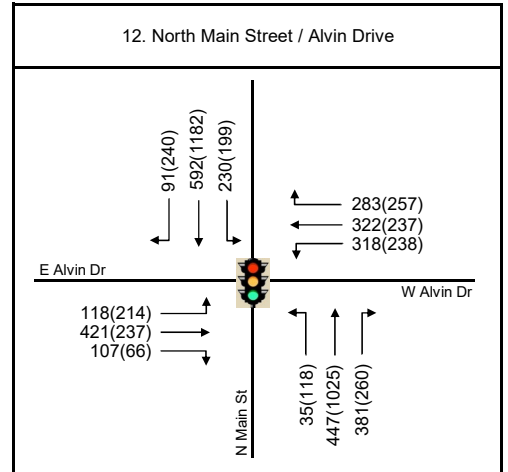
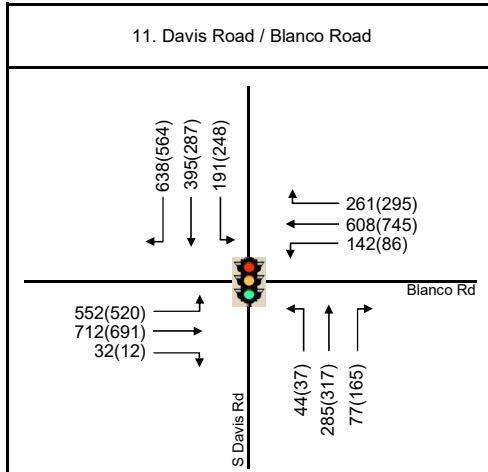
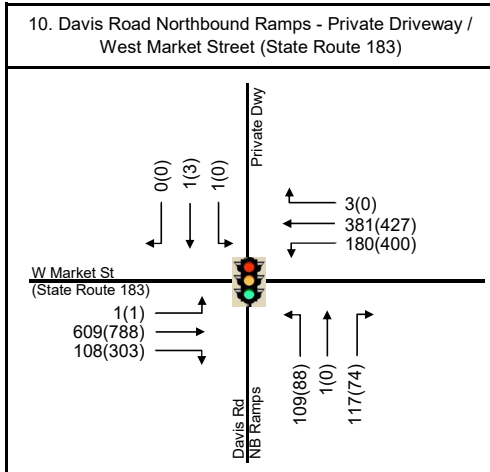






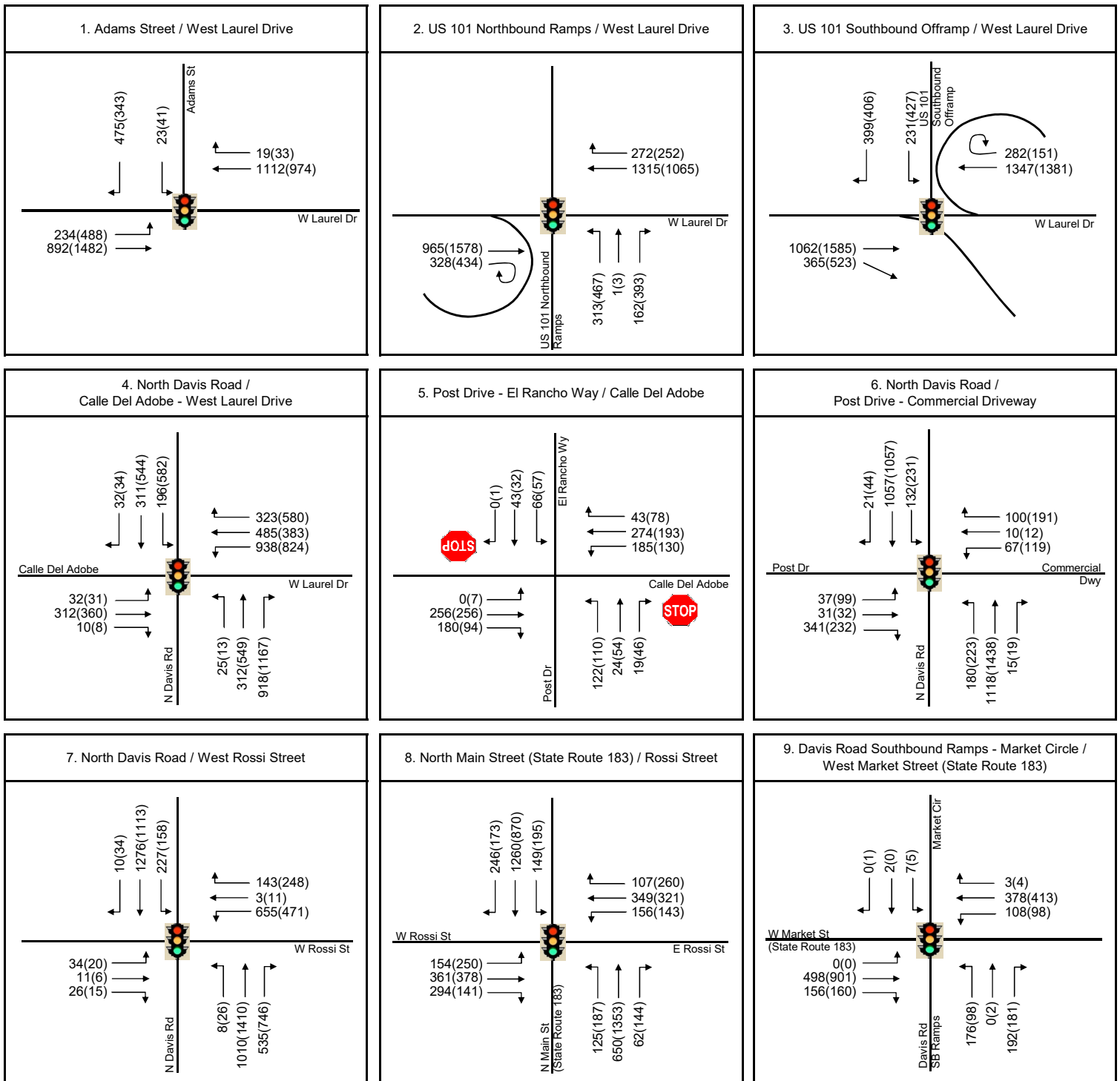
Keith Higgins
Traffic Engineer

Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



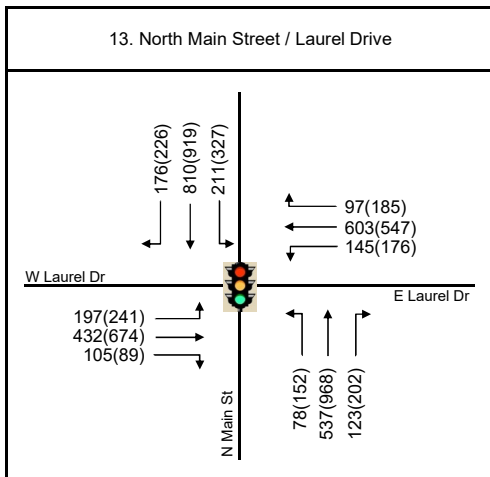
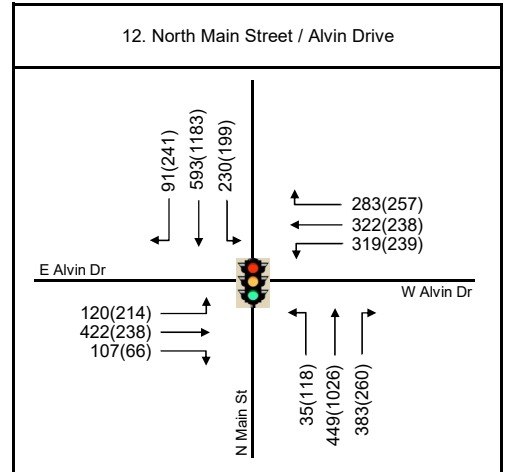
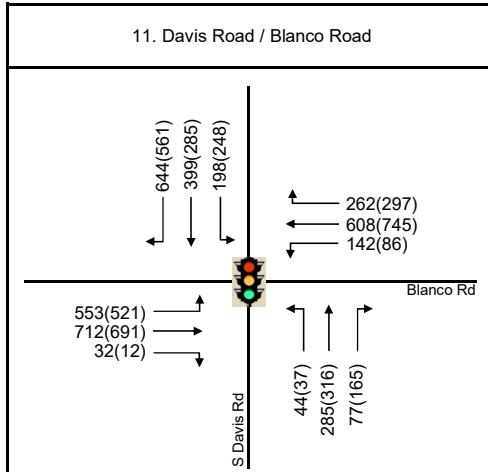
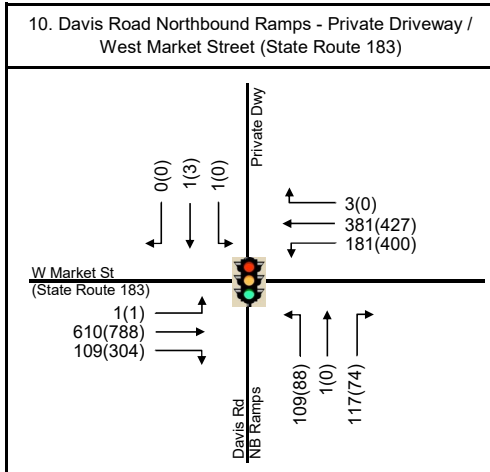
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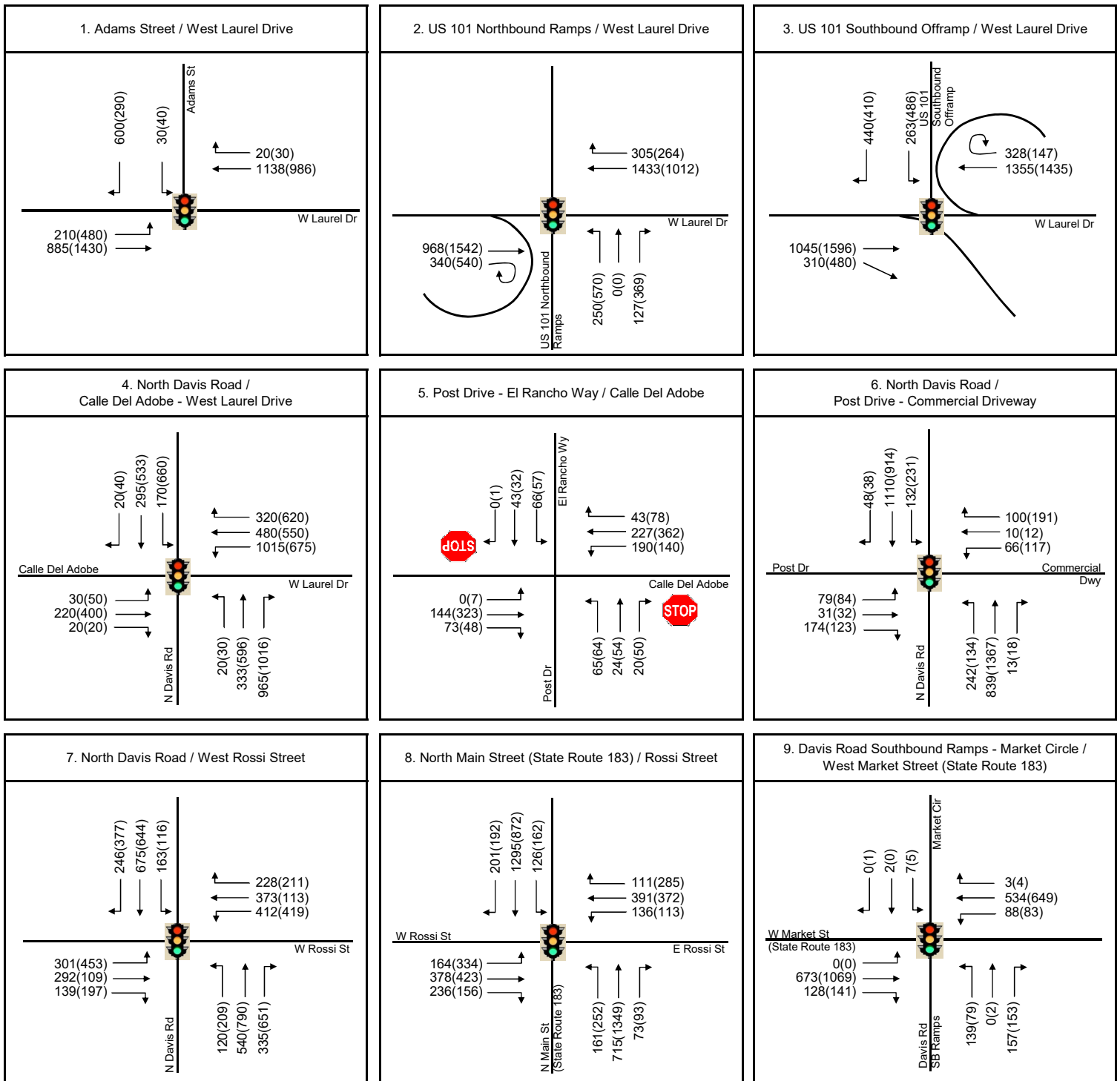
Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

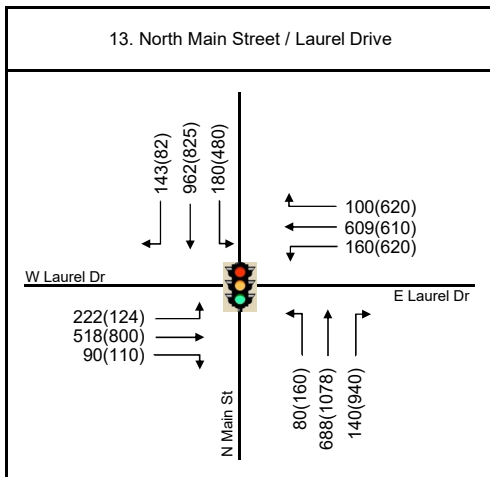
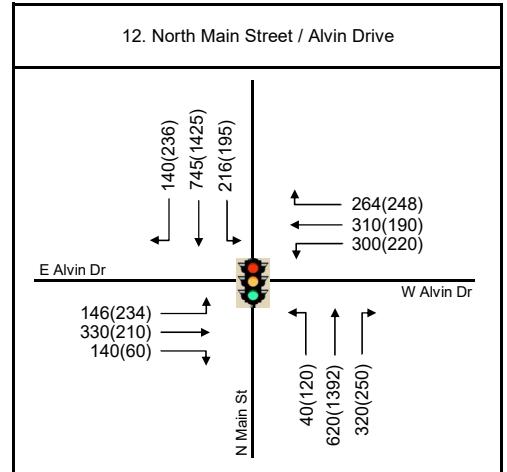
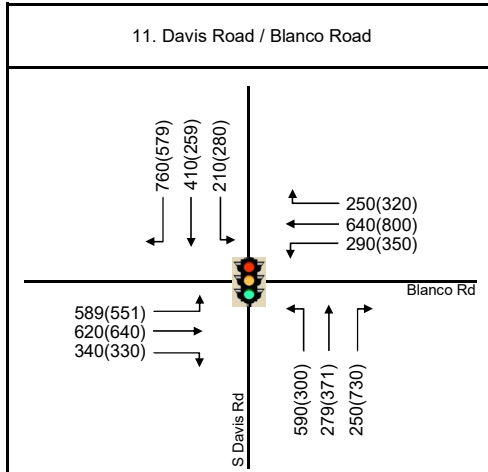
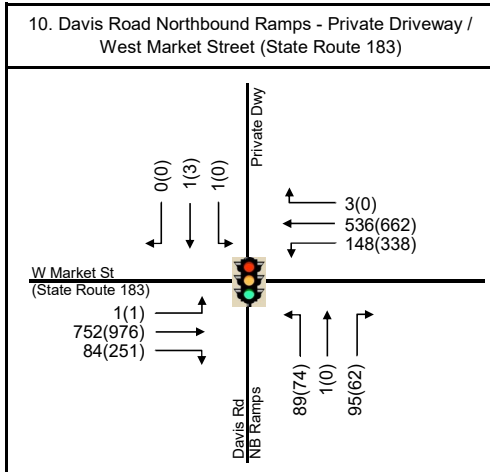


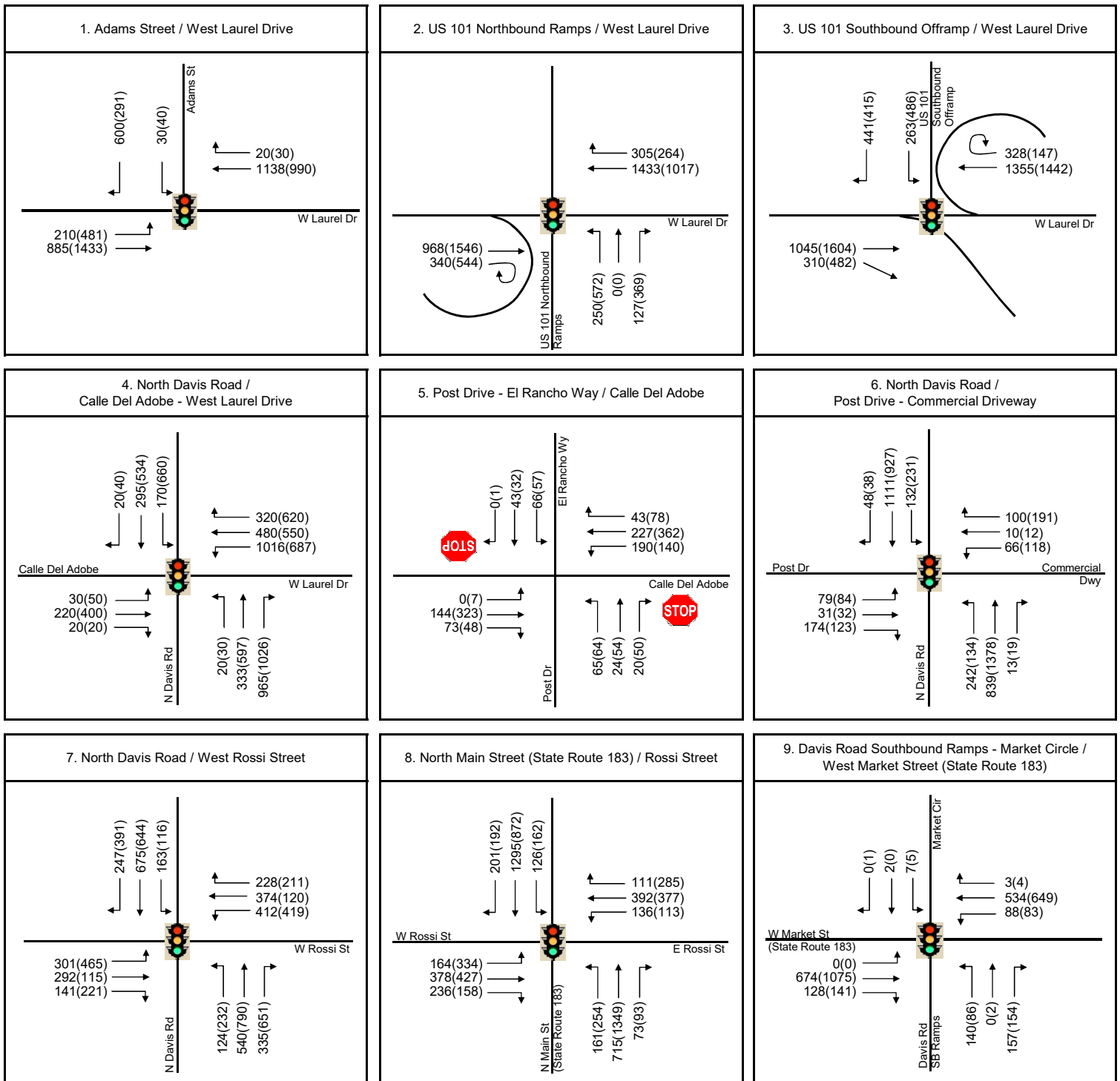
Keith Higgins
Traffic Engineer

Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



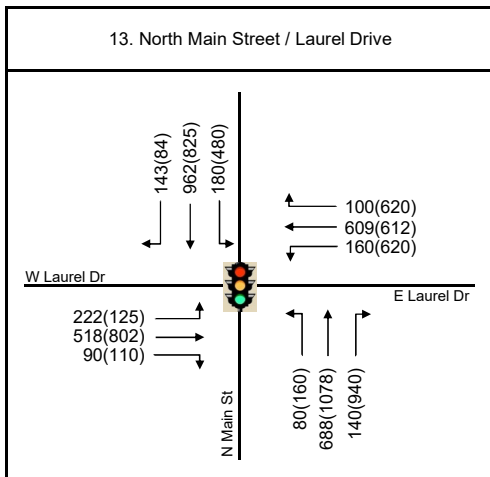
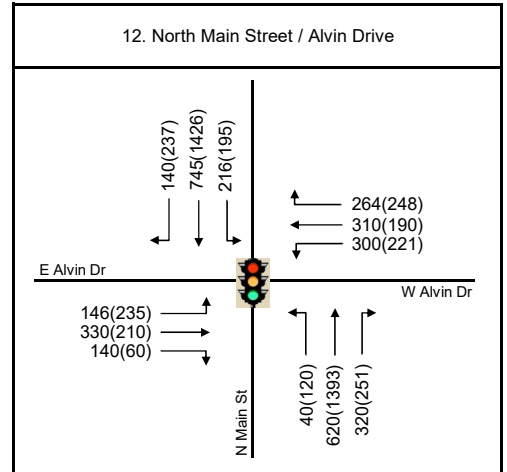
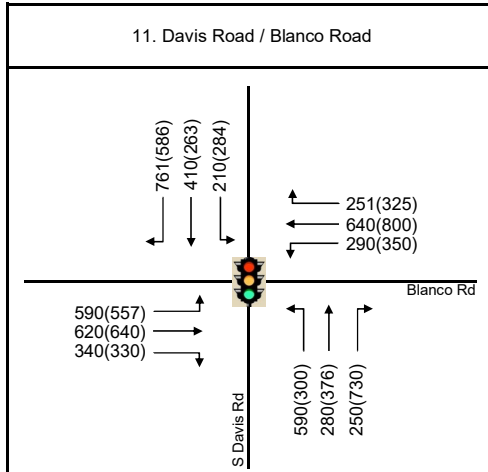
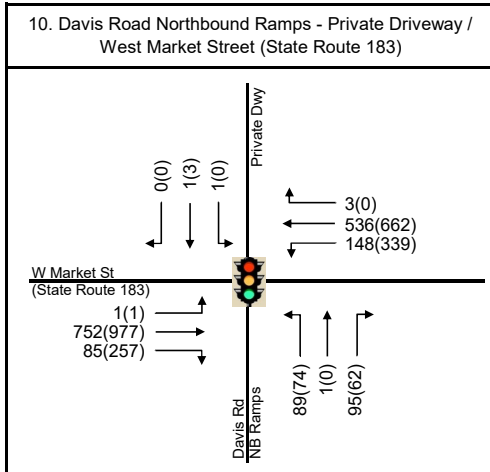






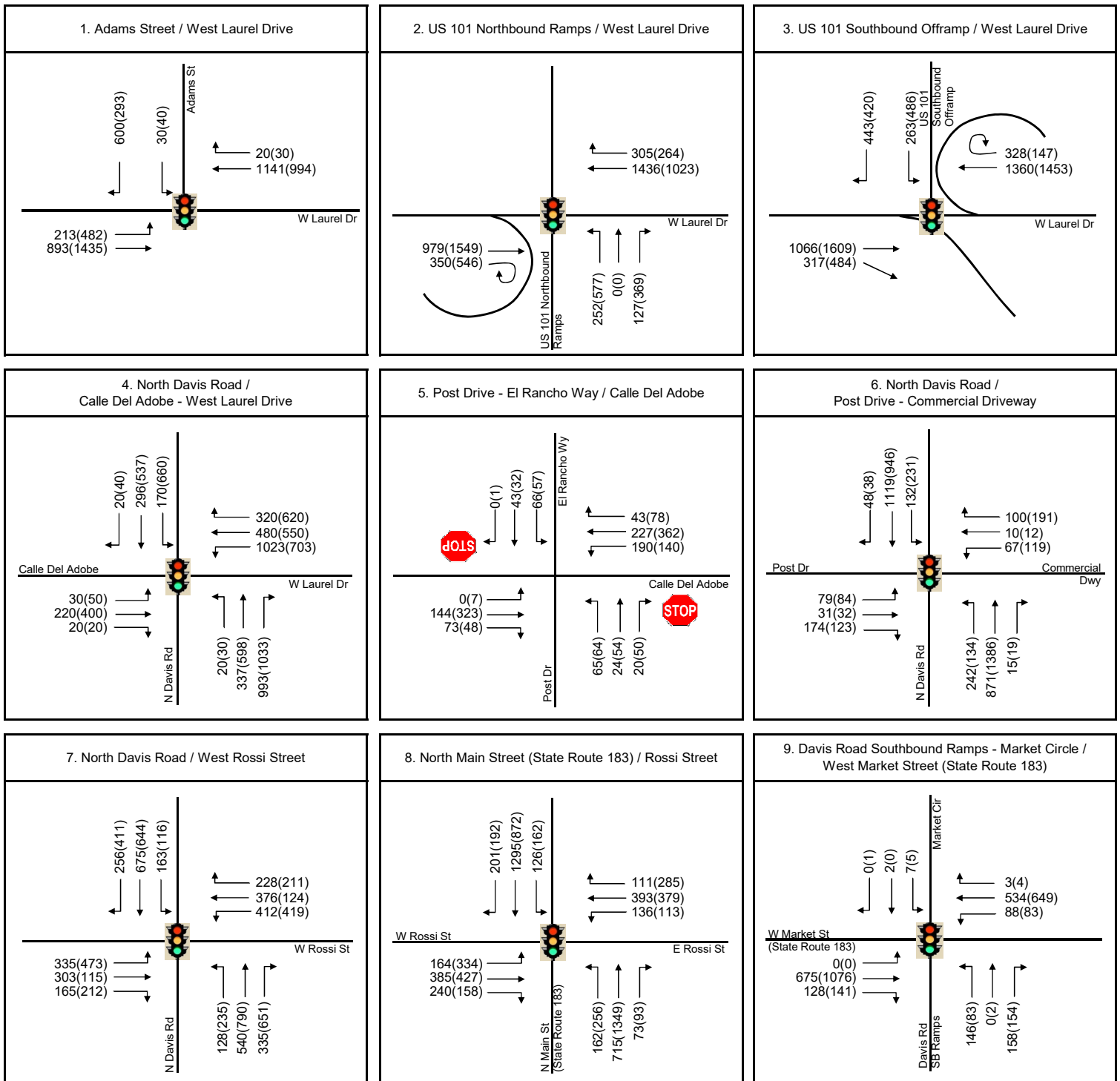
Keith Higgins
Traffic Engineer

Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



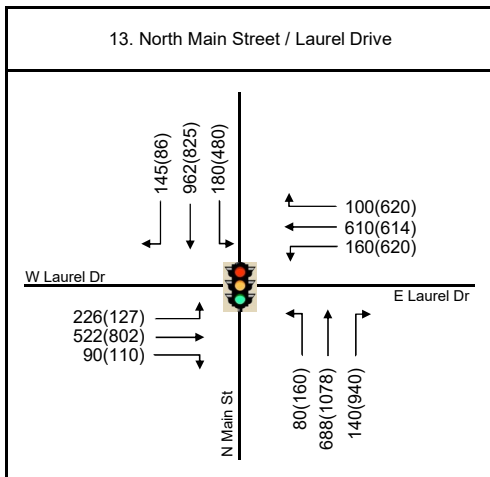
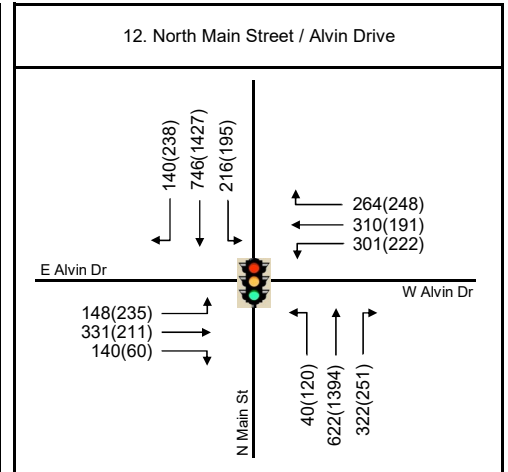
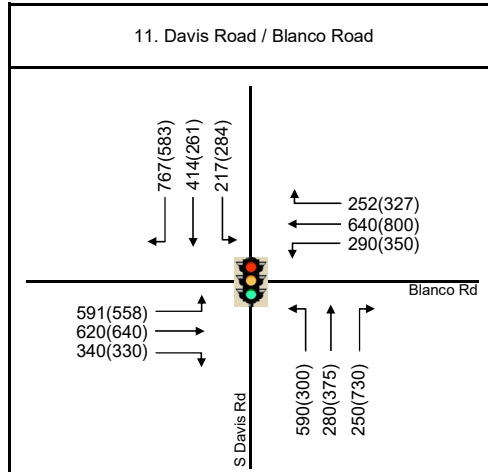
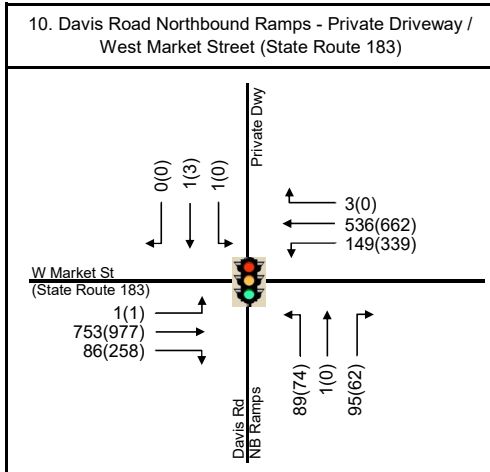
Keith Higgins
Traffic Engineer

Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)



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Traffic Engineer

Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



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Traffic Engineer

Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

Vehicle Trips - Ag Employee Housing Project Alternative

Employee Shuttles

Vehicle Type	Seating Capacity	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	32	33	66	15	miles	990
Van	15	8	16	15	miles	240
Subtotal:						1,230

Shuttle Trips Between Project Site and Storage Area

Vehicle Type	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	33	66	6	miles	400
Van	8	0	0	miles	0
Subtotal:					400

Total VMT: 1,630 per day
326,000 per year

If all ag employees drove personal cars (assuming two person per vehicle):

Driving VMT: 18,000 per day
3,600,000 per year

Notes:

1. Number of buses and vans provided by project applicant.
2. Fields are assumed to be an average of 15 miles from the project site.
3. Per the project applicant, buses will be stored at a location 6 miles away and vans will be stored on the project site.
4. VMT per year estimated using 200 working days per year.
5. Estimate for driving employee comparison assumes two employees per vehicles, which is equivalent to 600 total vehicles per the project definition.

Keith Higgins
Traffic Engineer

Exhibit 18A
Project Vehicle Miles Traveled
Calculation
(Ag Employee Housing)

Vehicle Miles Traveled - Apartments Project Alternative

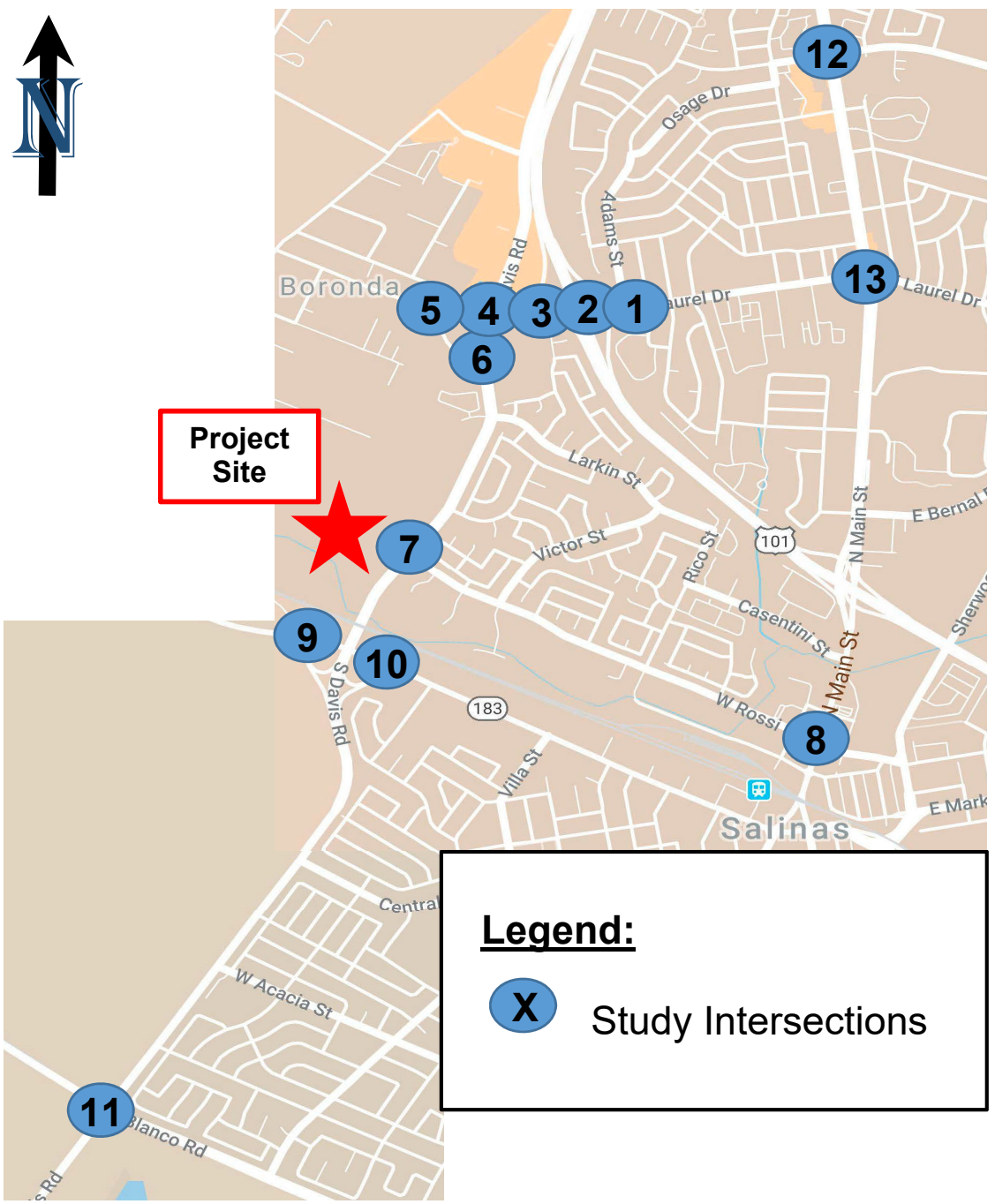
Location	Percent of Net Project Traffic	Daily Project Traffic	Distance from Project (miles)	Vehicle Miles Traveled
Salinas	57%	834	2.50	2,085
Marina	5%	73	9.00	657
Seaside	3%	44	15.00	660
Monterey	10%	146	18.00	2,628
Prunedale	7%	102	8.00	816
Castroville	5%	73	8.00	584
Watsonville	4%	59	19.00	1,121
Gonzales	1%	14	19.00	266
Soledad	1%	15	28.00	420
Greenfield	1%	15	37.00	555
San Benito County	3%	44	27.00	1,188
Santa Clara County	3%	44	30.00	1,320
Total:	100%	1,463		12,300
Project Average Trip Length				8.4
Regional Average Home-Based Trip Length				8.9
Project Percent of Regional Average Home-Based Trip Length				94%
Apartment Occupants per Unit				3.73
Number of Apartments				200
Number of People Living in Apartments				746
Average Residential Vehicle-Miles Traveled (miles/resident):				16.5
Average AMBAG Region VMT per Capita				21.66
Project Percent of Regional VMT per Capita				76%

Notes:

1. Total daily net project residential trips cited from trip generation on **Exhibit 5**.
2. Apartment Occupants per Unit is average household size in Salinas in 2010 US Census, per the 2010 US Census (factfinder.census.gov).

Keith Higgins
Traffic Engineer

Exhibit 18B
Project Vehicle Miles Traveled
Calculation
(Apartments)



Basemap Source: Google Maps, 2019.

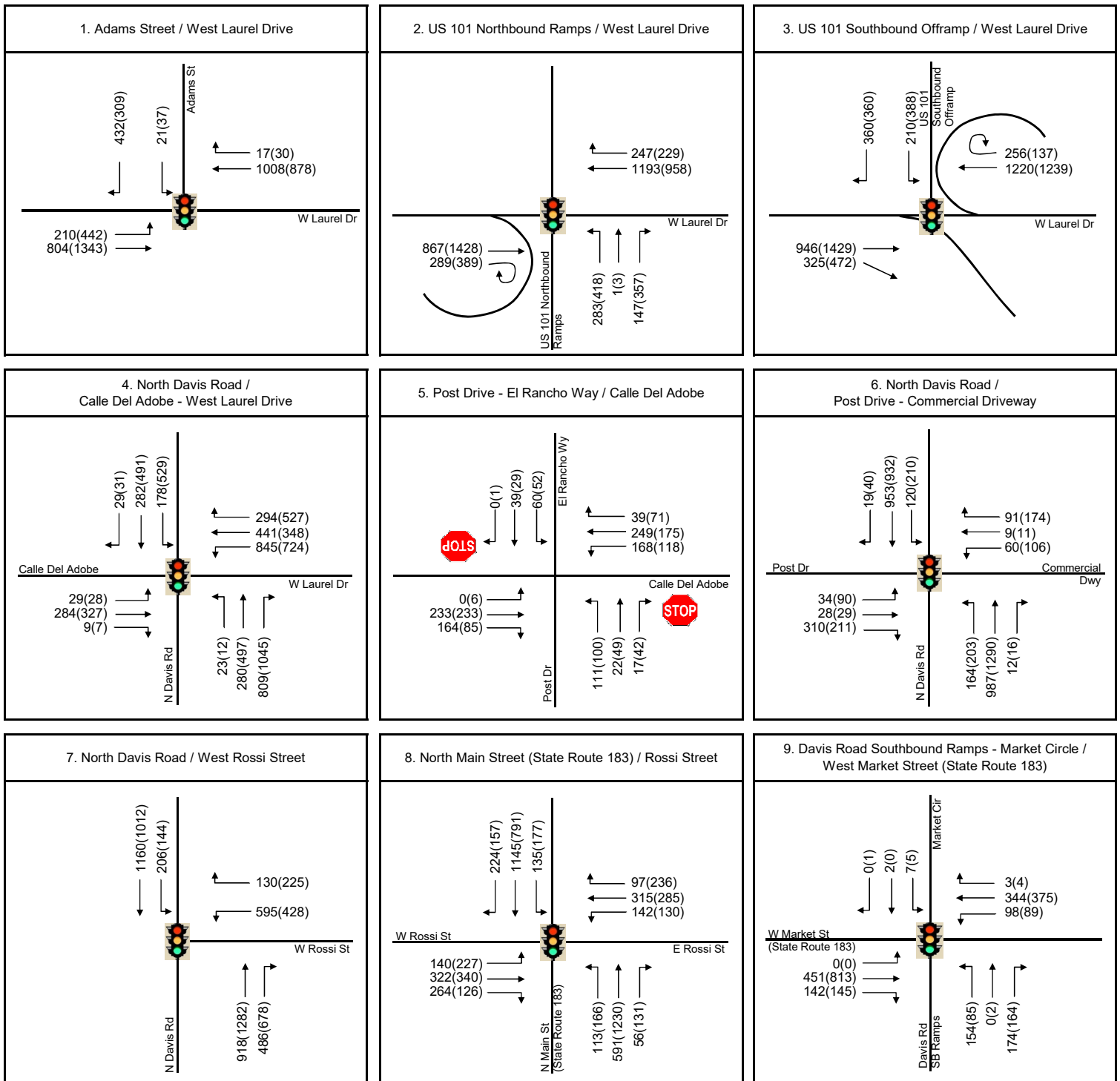


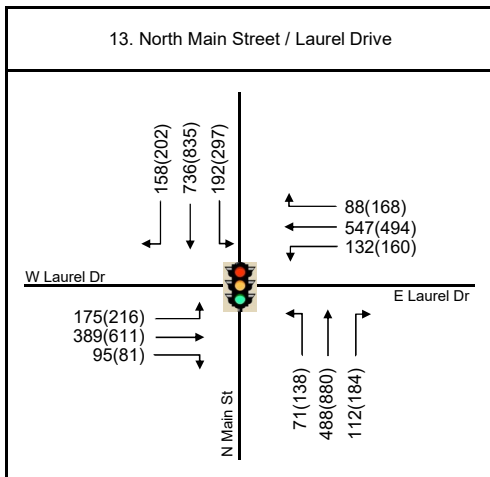
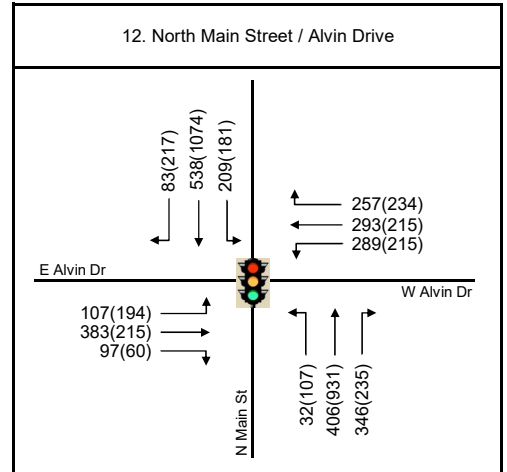
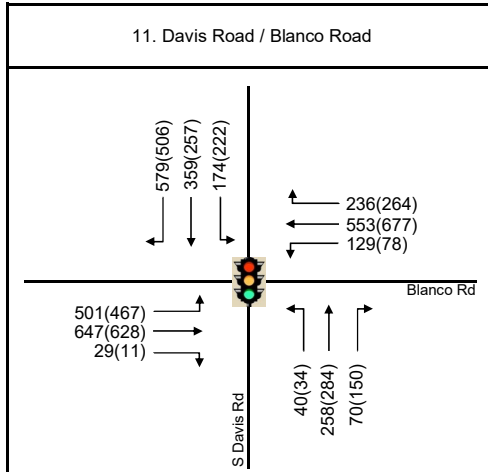
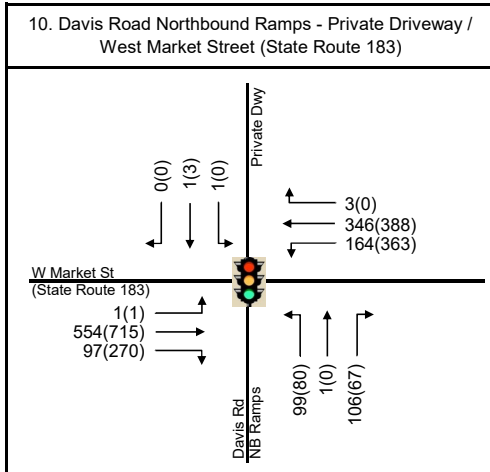
150 UNITS
150 X 8 BEDS = 1,200 BEDS
360 SPACES

Source: RRM Design Group, 10/29/19.

Keith Higgins
Traffic Engineer

Exhibit 2
Project Site Plan





N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apt) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apt) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apt) Conditions	
							Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Adams Street	City of Salinas	SB 1-L, 1-R EB 1-L, 2-T WB 1-T, 1-T/R	Signal	D	AM PM	16.6	B	16.7	B	22.6	C	22.7	C	22.9	C	47.7	D	47.7	D	47.7	D	47.7	D
							15.2	B	15.5	B	22.0	C	22.3	C	22.5	C	21.3	C	21.6	C	21.8	C		
2	US 101 Northbound Ramps	Caltrans	NB 1-L, 1-L/T, 1-R EB 2-T WB 1-T, 1-T/R	Signal	C-D	AM PM	13.9	B	14.0	B	18.0	B	17.9	B	18.0	B	28.4	C	28.4	C	28.6	C	28.6	C
							17.9	B	18.1	B	22.1	C	22.3	C	22.5	C	20.6	C	20.7	C	20.9	C		
3	US 101 Southbound Offramp	Caltrans	SB 2-L, 1-R EB 2-T WB 2-T	Signal	C-D	AM PM	10.1	B	10.2	B	12.9	A	13.0	B	13.2	B	14.9	B	14.9	B	15.6	B	15.6	B
							10.9	B	11.3	B	14.2	B	14.6	B	14.9	B	15.0	B	15.4	B	15.7	B		
4	N Davis Road	City of Salinas	NB 1-L, 2-T, 2-R SB 2-L, 1-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 2-L, 2-T, 1-R	Signal	D	AM PM	25.0	C	25.1	C	28.3	C	28.3	C	28.6	C	26.6	C	26.6	C	26.8	C	26.8	C
							39.7	D	40.8	D	54.4	D	56.1	E	58.2	E	53.6	D	54.2	D	55.2	E		
							With TDM Measures																	
							With Improvement																	
5	Post Drive - El Rancho Way	Monterey County	NB 1-L, 1-T/R SB 1-L/T, 1-R EB 1-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Two-Way Stop	E/E	AM PM	77.174.7	F/F	77.174.7	F/F	176.5/148.6	D/D	176.5/148.6	F/F	176.5/148.6	F/F	28.8/46.7	D/E	28.8/46.7	D/E	28.8/46.7	D/E	28.8/46.7	D/E
							21.9/26.5	C/D	21.9/26.5	C/D	27.5/34.5	D/D	27.5/34.5	D/D	27.5/34.5	D/D	34.7/72.0	D/F	34.7/72.0	D/F	34.7/72.0	D/F		
							With Improvement																	
							With Improvement																	
6	N Davis Road	City of Salinas	NB 1-L, 2-T, 1-T/R SB 1-L, 2-T, 1-R EB 1-L, 1-L/T, 1-R WB 1-L/T, 1-R	Signal	D	AM PM	43.4	D	43.7	D	56.0	E	56.1	E	56.7	E	47.3	D	47.4	D	47.5	D	47.5	D
							44.3	D	44.9	D	61.2	E	62.9	E	65.1	E	37.6	D	37.9	D	38.2	D		
							With TDM Measures																	
							With Improvement																	
7	N Davis Road	City of Salinas	NB 2-T, 1-R SB 1-L, 2-T WB 2-L, 1-R	Signal	D	AM PM	17.7	B	29.8	C	22.9	C	37.2	D	38.0	D	52.2	D	52.8	D	59.0	E	59.0	E
							22.9	C	35.3	D	34.9	C	51.7	D	51.9	D	88.8	F	94.7	F	95.7	F		
							With TDM Measures																	
							With Improvement																	
8	N Main Street (State Route 183)	Caltrans	NB 1-L, 2-T, 1-R SB 1-L, 2-T, 1-R EB 2-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Signal	C-D	AM PM	44.0	D	44.0	D	58.9	E	59.0	E	60.1	E	66.0	E	66.1	E	67.4	E	67.4	E
							41.7	D	41.8	D	54.8	D	55.1	E	55.3	E	70.3	E	71.3	E	71.6	E		
							With TDM Measures																	
							With Improvement																	
9	Davis Road Southbound Ramps - Market Circle	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM PM	17.1	B	17.2	B	18.8	B	18.8	B	18.8	B	22.4	C	22.4	C	22.4	C	22.4	C
							20.9	C	21.0	C	25.1	C	25.3	C	25.4	C	35.2	D	35.9	D	36.0	D		
							With TDM Measures																	
							With Improvement																	

N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apts) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apts) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apts) Conditions			
							Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
10	Davis Road Northbound Ramps - Private Driveway	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM PM	20.6	C	20.7	C	20.8	C	23.3	C	23.4	C	23.4	C	25.5	C	25.5	C	25.8	C		
							37.6	D	38.4	D	38.5	D	53.5	D	54.7	D	54.9	D	61.6	E	63.3	E	63.5	E		
									20.7	C			23.4	C			25.5	C			25.5	C				
									37.7	D			53.6	D			61.8	E								
11	Davis Road	Monterey County	NB 1-L, 1-T, 1-T/R SB 1-L, 1-T, 1-R EB 2-L, 1-T, 1-T/R WB 1-L, 2-T, 1-R	Signal	D	AM PM	32.5	C	32.5	C	33.0	C	37.2	D	37.2	D	37.3	D	357.2	F	357.2	F	356.8	F		
							37.8	D	38.5	D	38.6	D	46.7	D	47.8	D	47.9	D	239.8	F	240.1	F	240.2	F		
12	N Main Street	City of Salinas	NB 1-L, 2-T, 1-T/R SB 2-L, 3-T, 1-R EB 1-L, 2-T, 1-R WB 1-L, 1-T, 1-R	Signal	D	AM PM	35.3	D	35.3	D	35.6	D	43.2	D	43.2	D	43.5	D	35.8	D	35.8	D	36.1	D		
							29.1	C	29.2	C	29.2	C	34.7	C	34.8	C	34.8	C	64.3	E	65.0	E				
13	N Main Street	City of Salinas	NB 2-L, 2-T, 1-R SB 2-L, 2-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	AM PM	29.9	C	29.9	C	30.1	C	34.4	C	34.4	C	34.7	C	38.2	D	38.2	D	38.7	D		
							37.5	D	37.6	D	37.8	D	45.7	D	45.9	D	46.1	D	259.3	F	259.6	F	260.3	F		
			WB																							

N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1 Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2 US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3 US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4 N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass (TFO 2b) 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5 Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6 N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EB/WB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7 N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T c. Add EB with L, 1-T/R	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8 N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9 Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1	Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2	US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3	US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4	N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5	Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6	N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EBWB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7	N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8	N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9	Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
10 Davis Road Northbound Ramps	W Market Street (State Route 183)	Signal	None Required	Add EB R	None Required	Add EB R	None Required	Add EB R
11 S Davis Road	Blanco Road	Signal	None Required	None Required	None Required	None Required	None Required	a. Add 2nd NB L, NB R b. Add 2nd SB T c. Add EB R d. Add 2nd WB L (TFO 73)
12 N Main Street	Alvin Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing
13 N Main Street	Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. RTO = Right Turn Overlap Signal Phase

Exhibit 4B
Recommended
Intersection Improvements
(Page 2 of 2)

Quattrin Agricultural Employee Housing Trip Generation

PROPOSED PROJECT - AGRICULTURAL EMPLOYEE HOUSING										
A. Project Trip Rates										
REFERENCE USE	EXISTING SIZE	DAILY TRIPS	AM PEAK HOUR				PM PEAK HOUR			
			PEAK HOUR	% OF ADT	% IN	% OUT	PEAK HOUR	% OF ADT	% IN	% OUT
Casa Boronda Ag. Employee Housing Driveway Count ¹	600 beds	N.A.	4		3	1	43		22	21
Trip Rates (per employee): ²		0.288	0.007		75%	25%	0.072		51%	49%
B. Project Trip Generation										
PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR				PM PEAK HOUR			
			PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT
Agricultural Employee Housing	1,200 beds	346	8	2%	6	2	86	25%	44	42
Raw (Peak Hour) Total (used in analysis):		346	8		6	2	86		44	42
Annual Average Total:		245	6		4	2	61		31	30
With TDM Work Schedule: ⁵		49	1		1	0	12		6	6

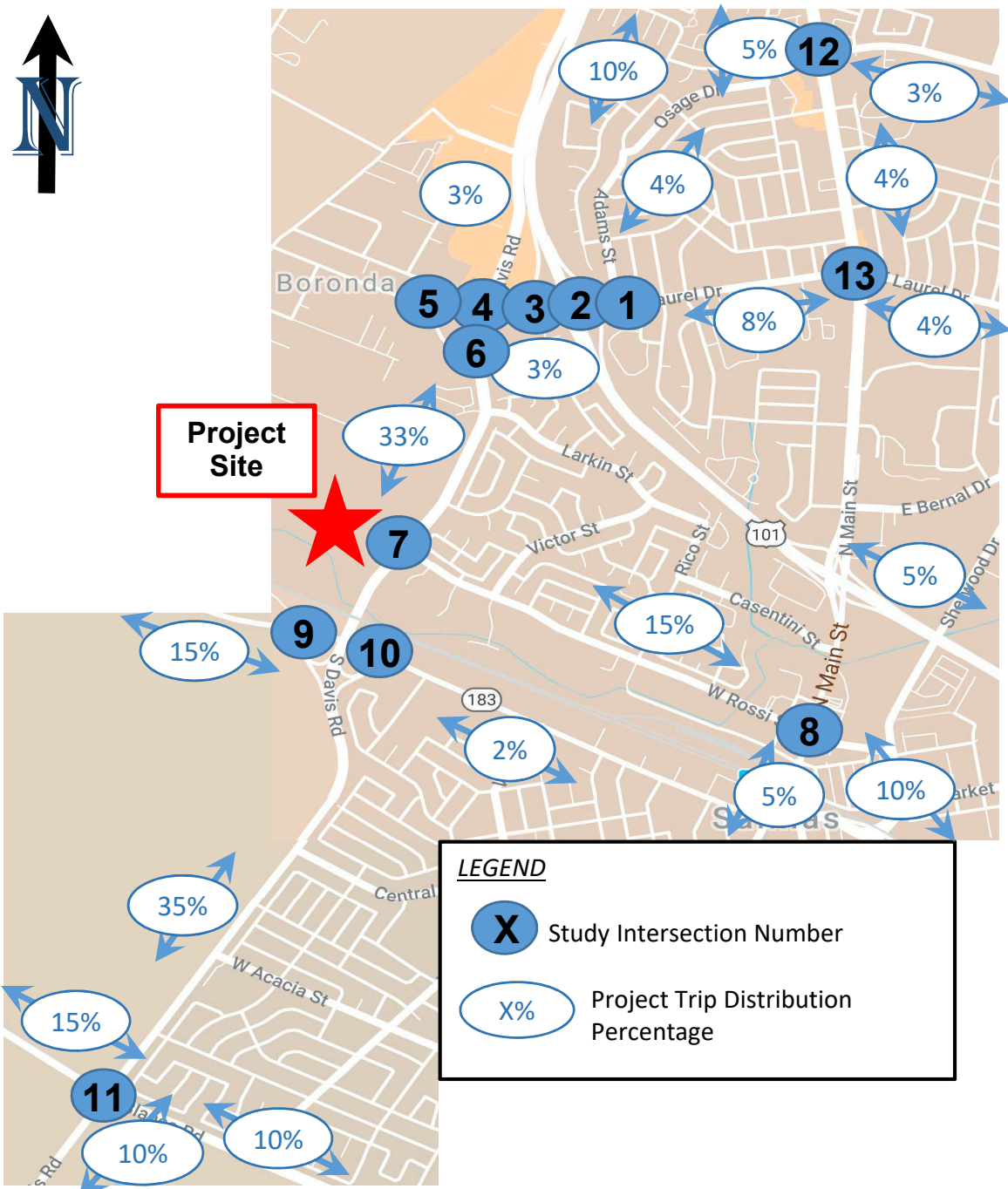
Notes:

1. AM and PM peak hour traffic at Casa Boronda was collected Tuesday, April 16, 2019. This data can be found in **Appendix C**.
2. Daily trip rate derived by assuming that PM peak rate is 25% of the daily trip rate.
3. Estimated trip generation for Casa Boronda project cited from *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis*, Keith Higgins Traffic Engineer, July 3, 2017.
4. Seasonal adjustment reflects that project is open for just 8.5 months of the year (i.e., approximately 71% of a year).
5. Project Traffic Demand Management (TDM) program proposes use of employee buses and vans largely outside of AM and PM peak hours.

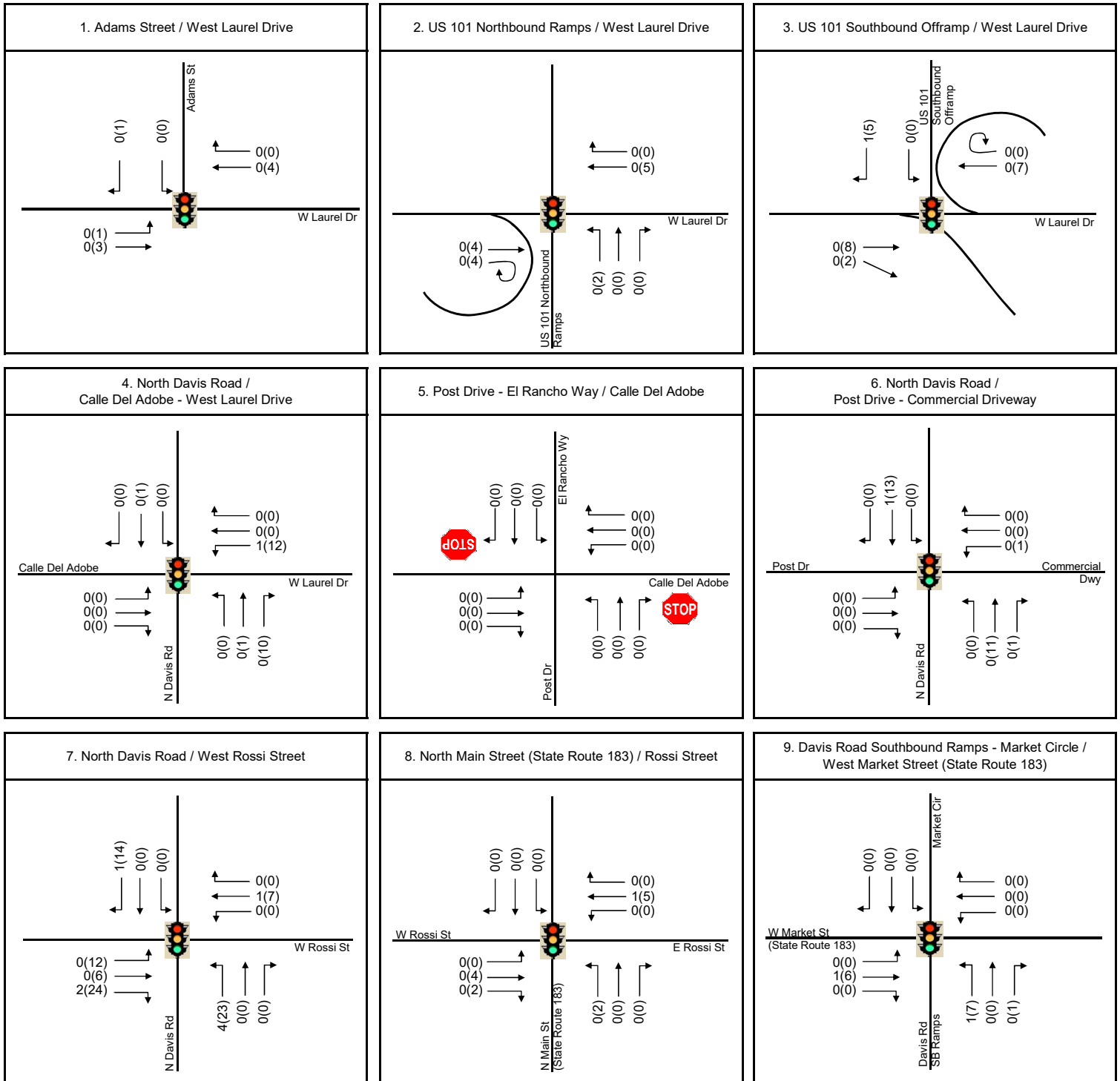
ALTERNATIVE PROPOSED PROJECT - APARTMENTS										
A. Project Trip Rates										
TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR				PM PEAK HOUR			
			PEAK HOUR	% OF ADT	% IN	% OUT	PEAK HOUR	% OF ADT	% IN	% OUT
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.56	8%	63%	37%
B. Project Trip Generation										
PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR				PM PEAK HOUR			
			PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR	% OF ADT	TRIPS IN	TRIPS OUT
Apartments	200 units	1,464	92	6%	21	71	112	8%	71	41
Total:										

Notes:

1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, 2017.
2. sq. ft. = square feet

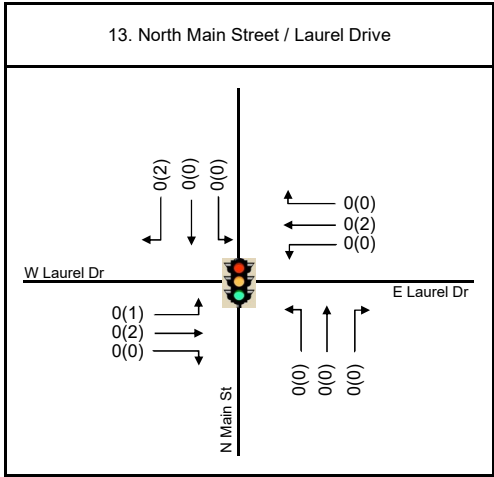
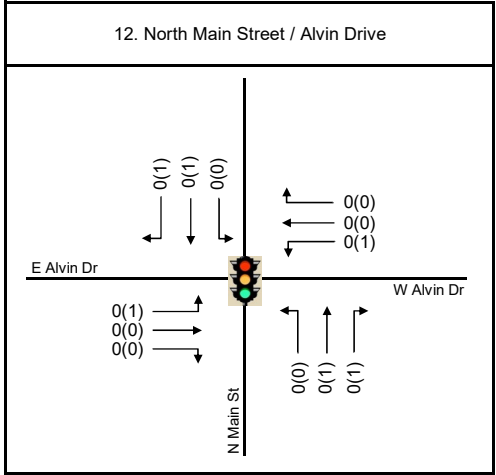
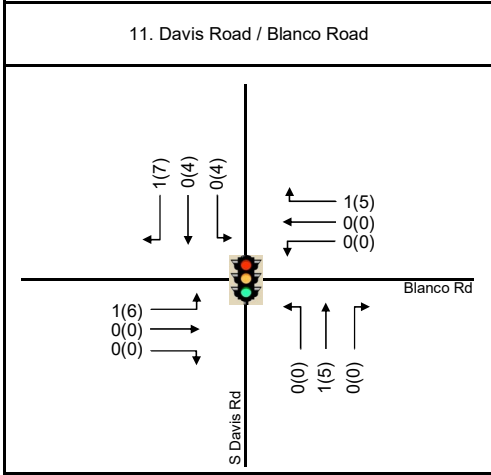
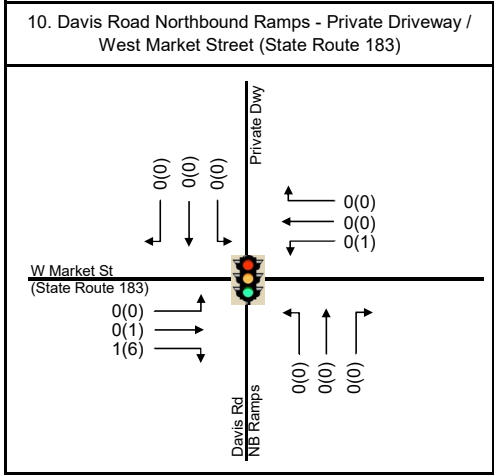


Basemap Source: Google Maps, 2019.



Keith Higgins
Traffic Engineer

Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



Keith Higgins
Traffic Engineer

Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

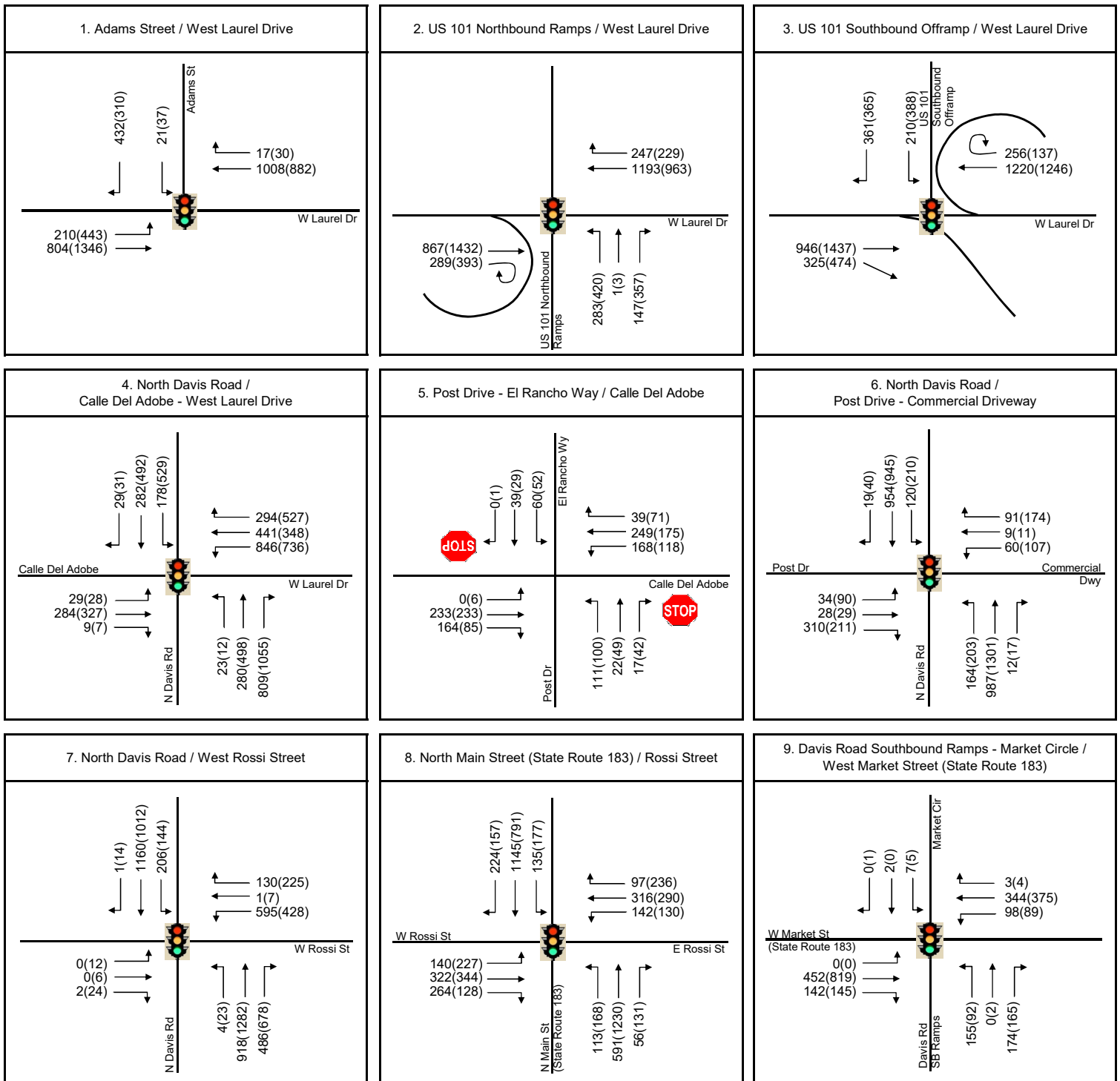


Exhibit 8

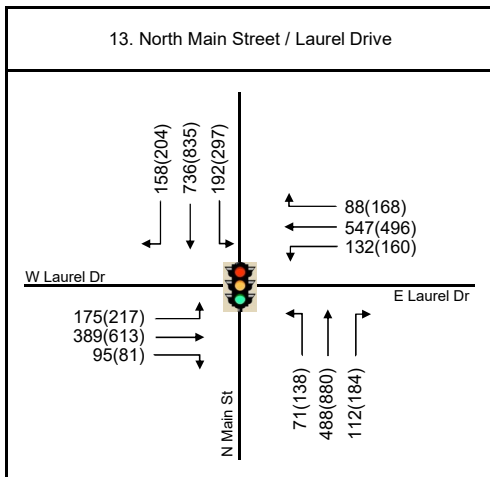
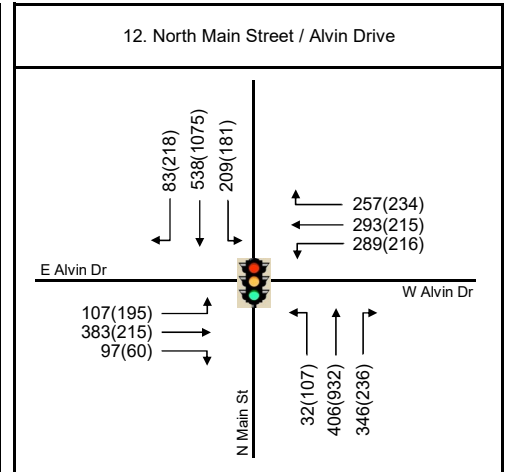
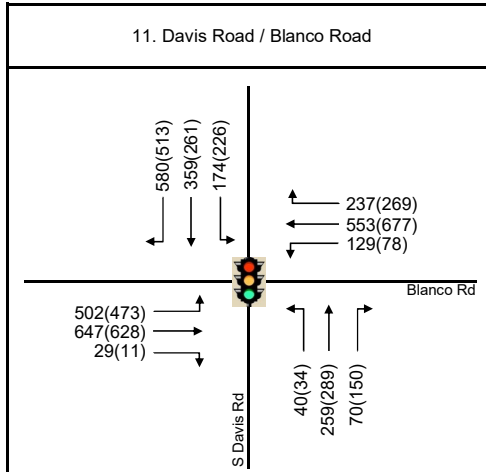
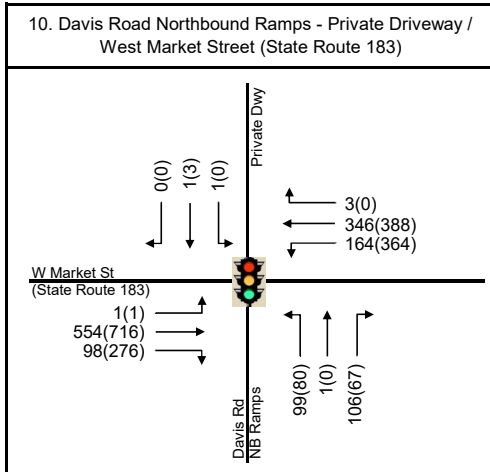
Existing Plus Project Conditions

Ag Employee Housing

AM & PM Peak Hour Volumes

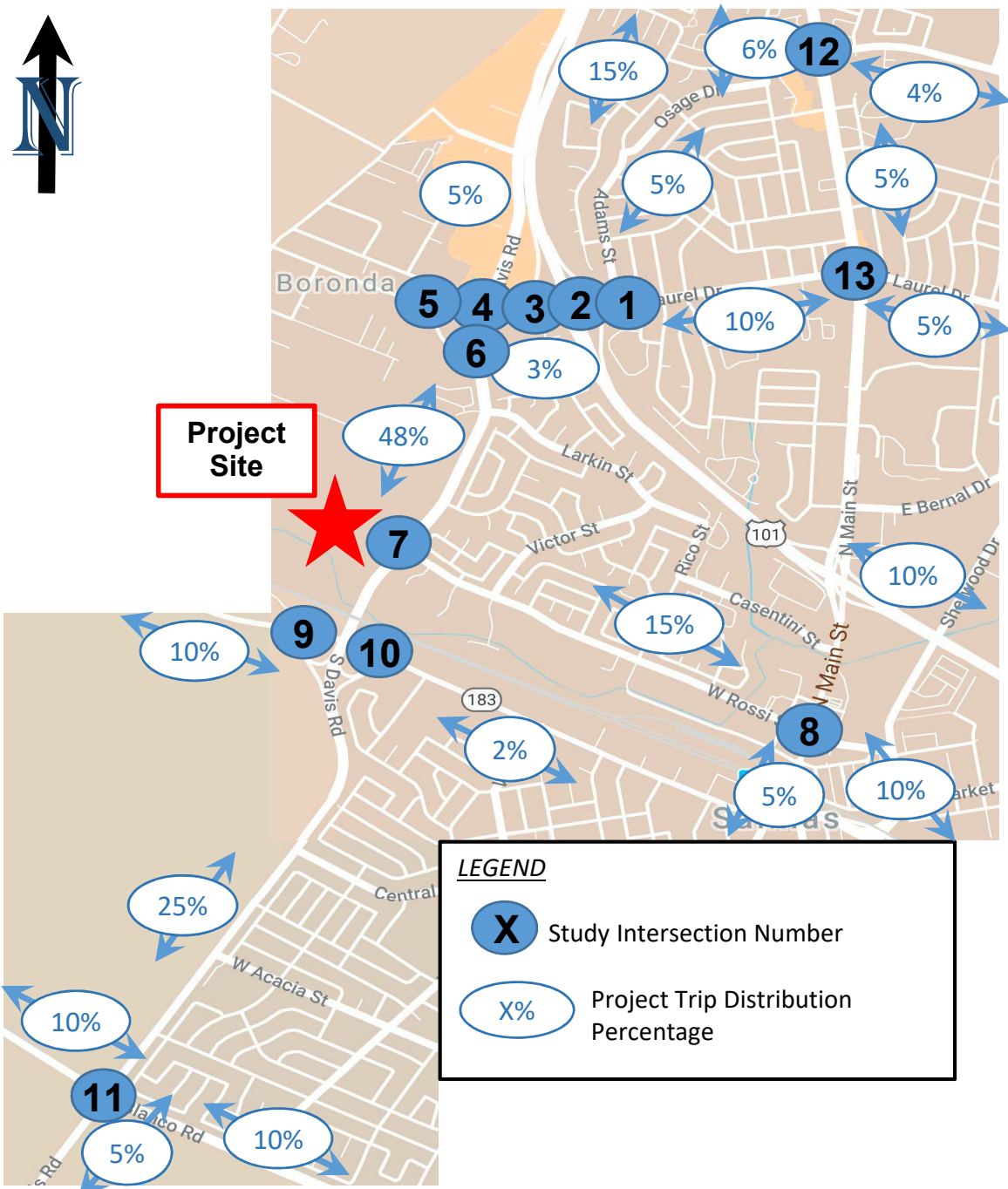
(Page 1 of 2)

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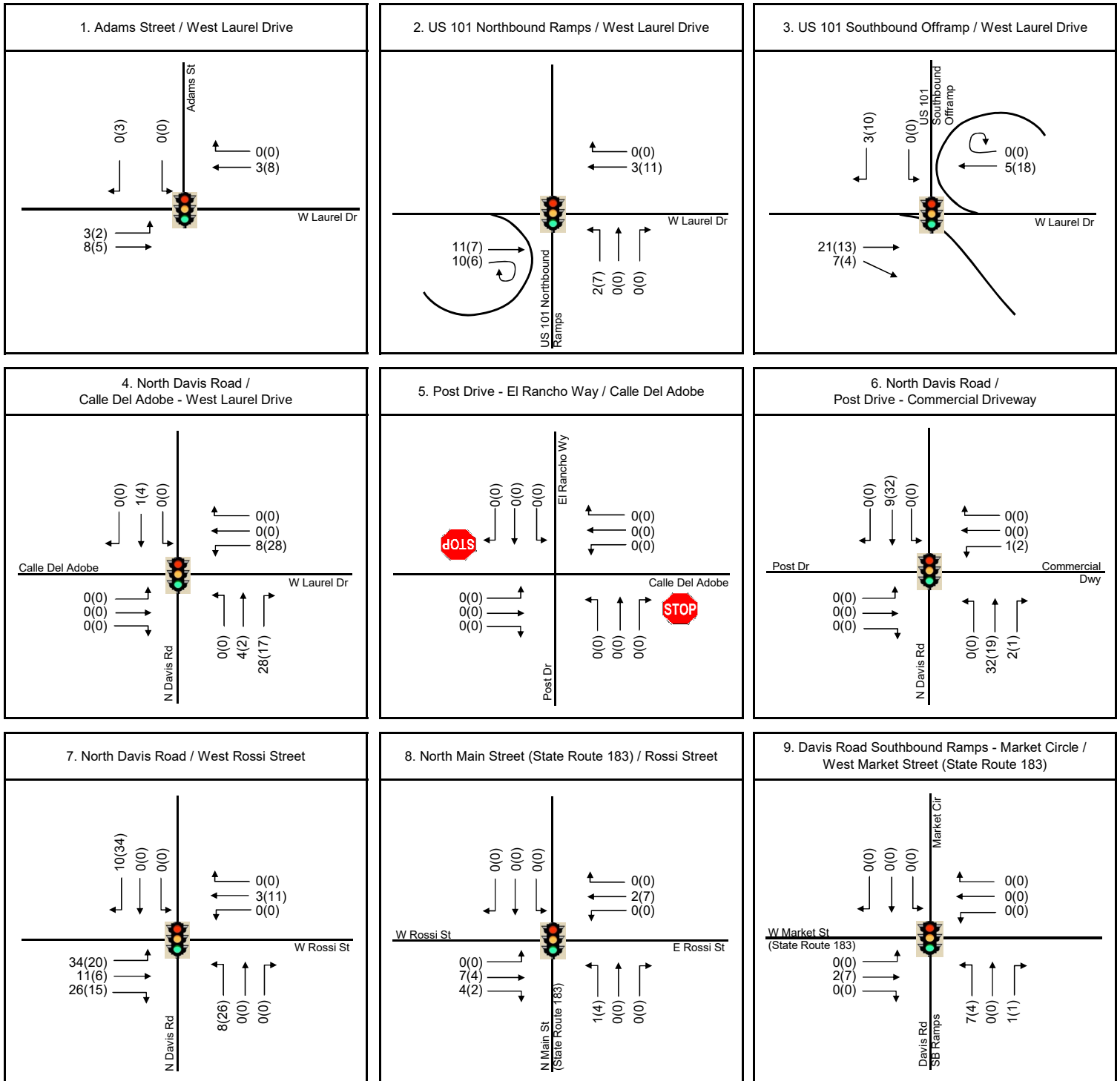


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Traffic Engineer

Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

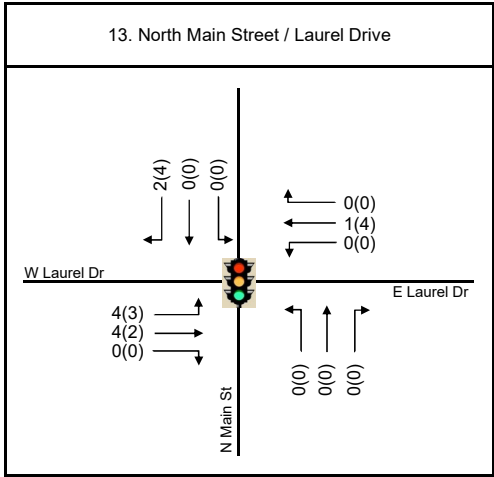
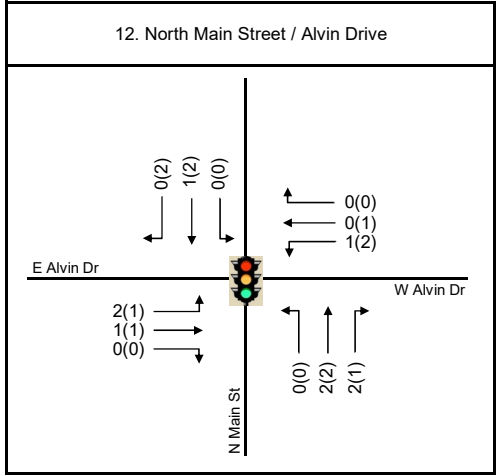
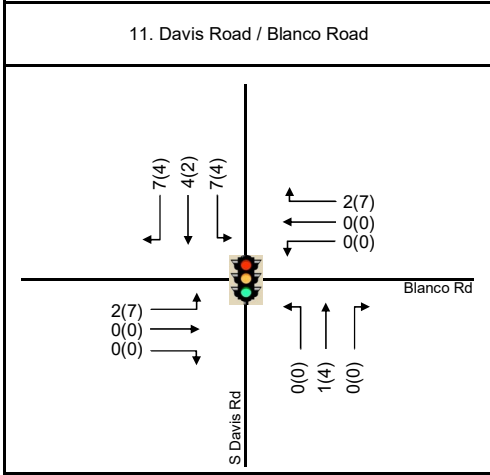
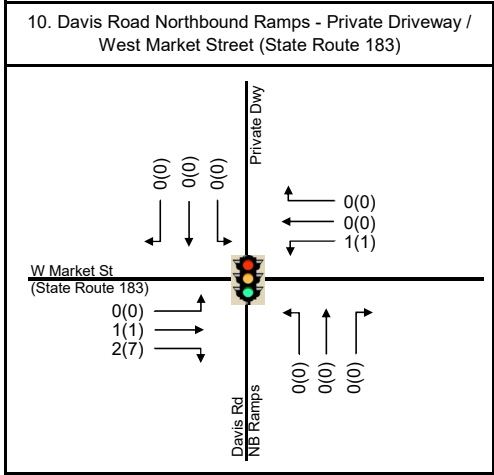


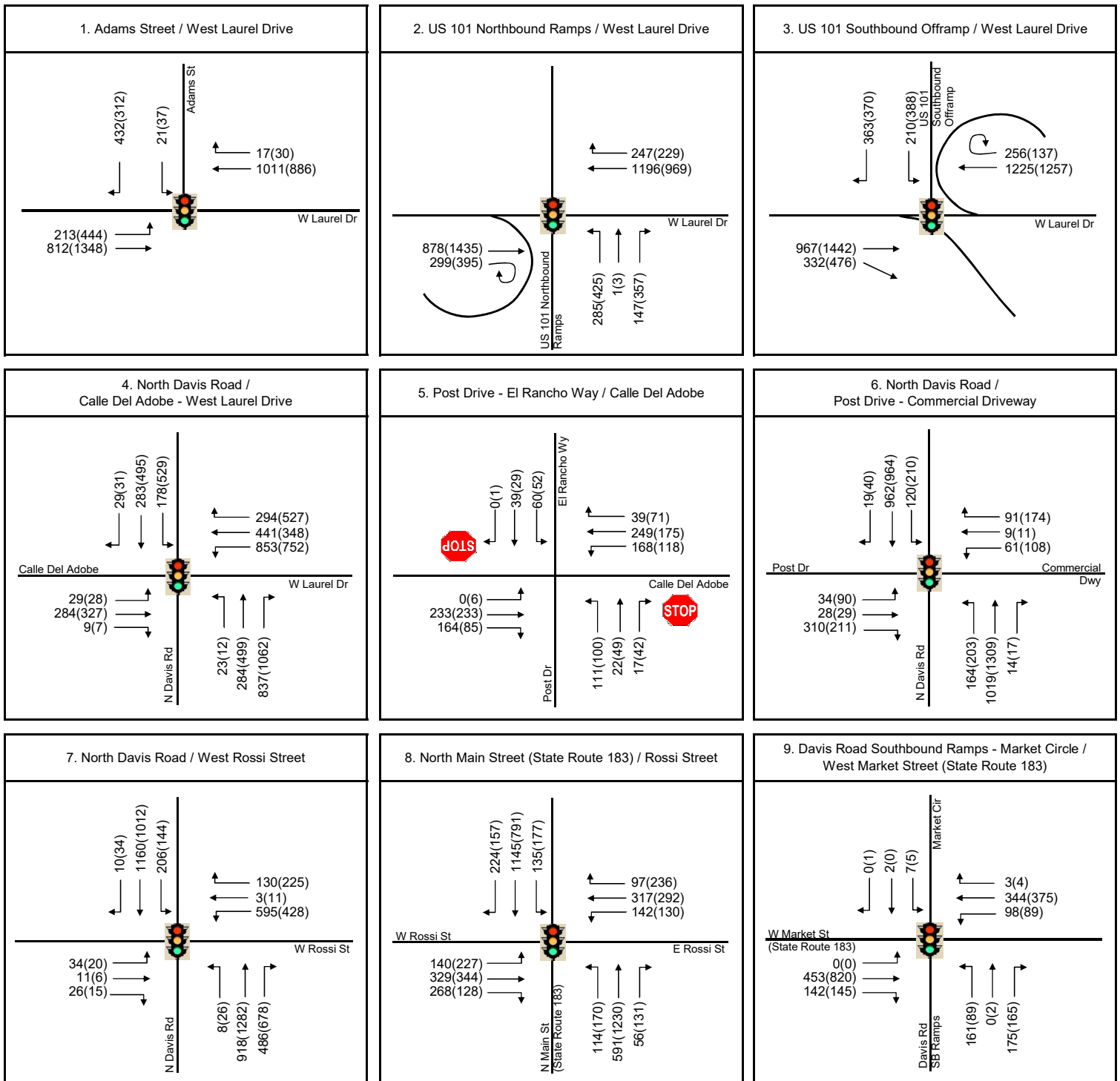
Basemap Source: Google Maps, 2019.



Keith Higgins
 Traffic Engineer

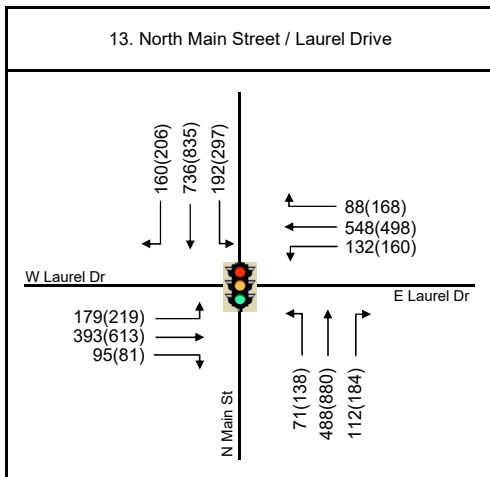
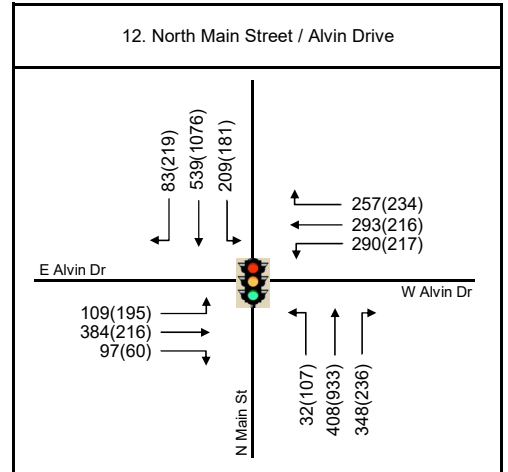
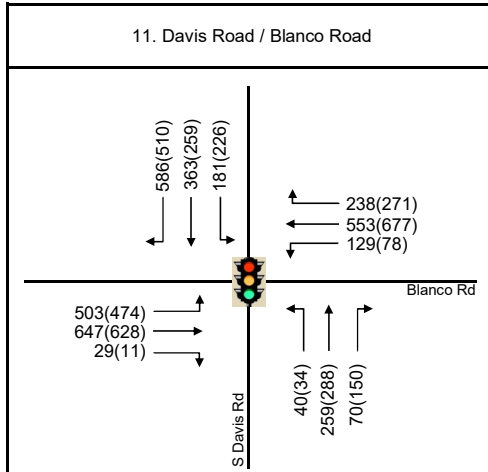
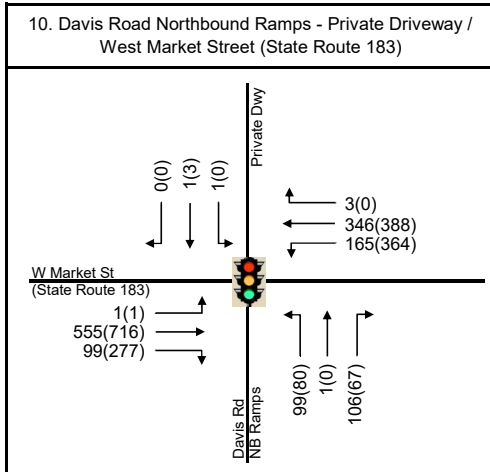
Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)





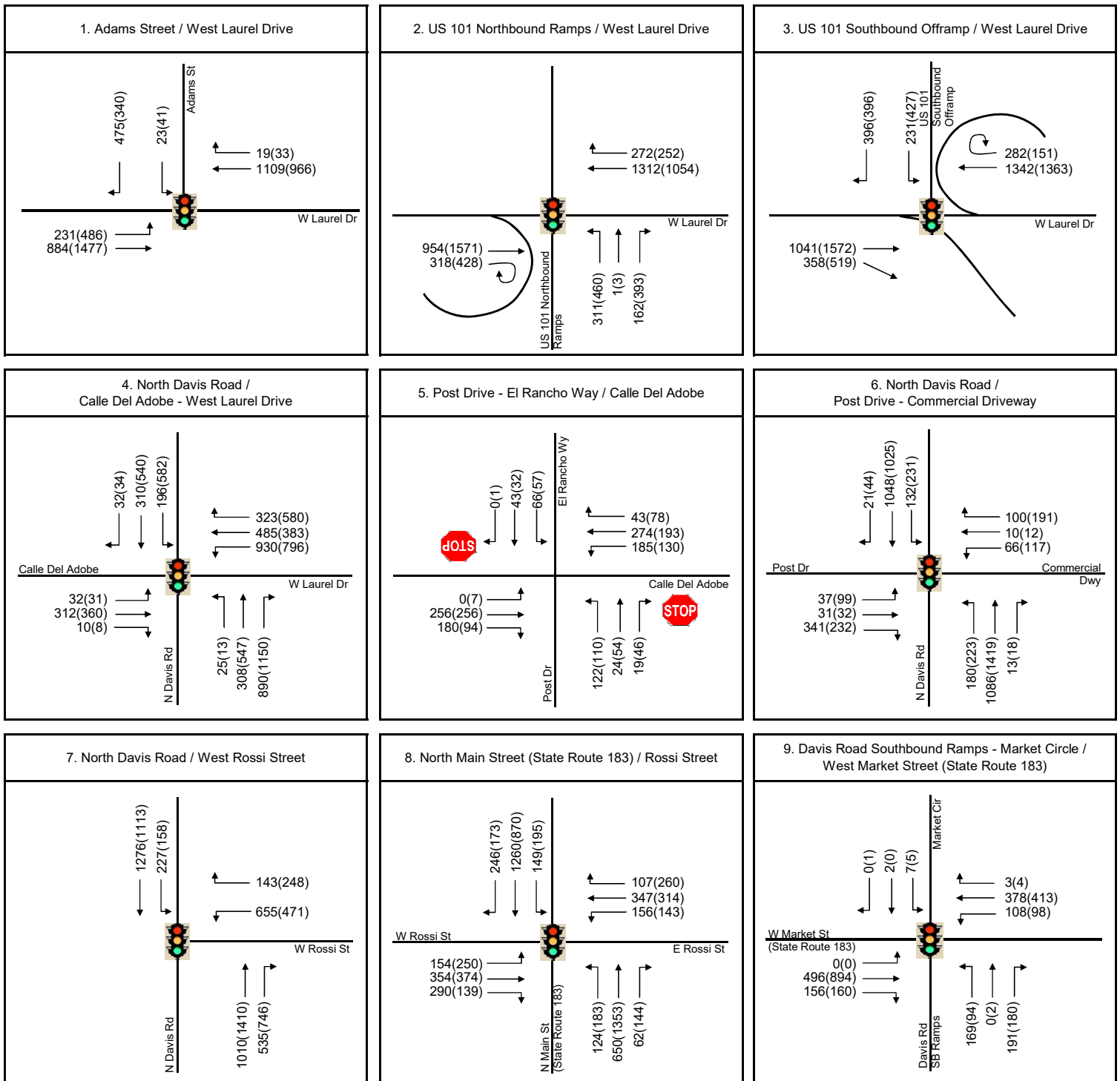
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Traffic Engineer

Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



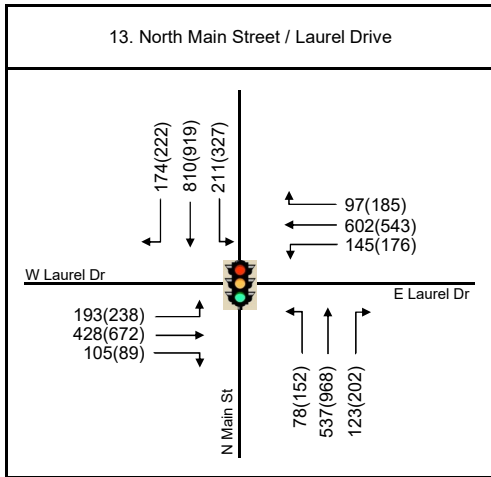
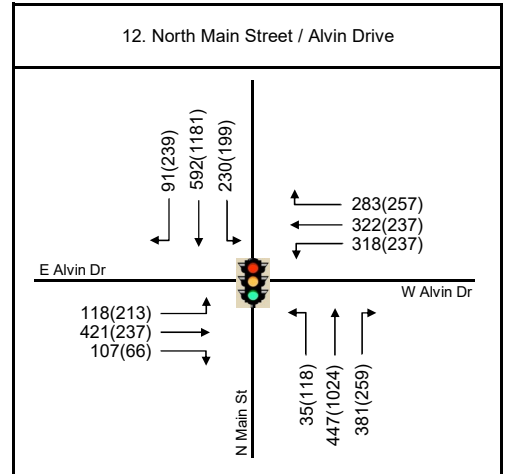
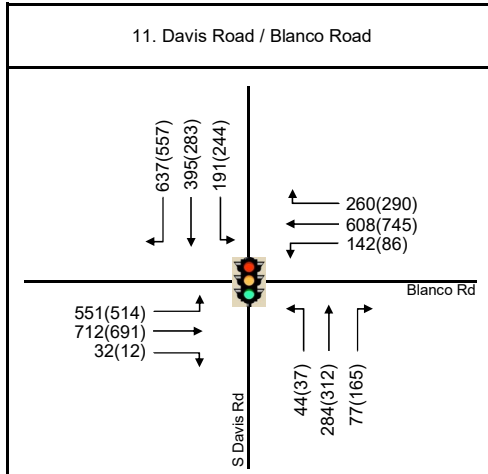
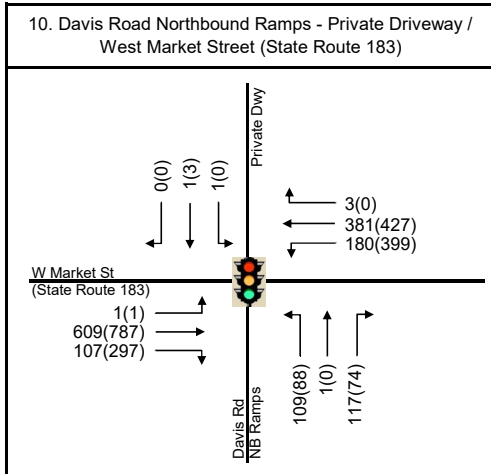
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Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)



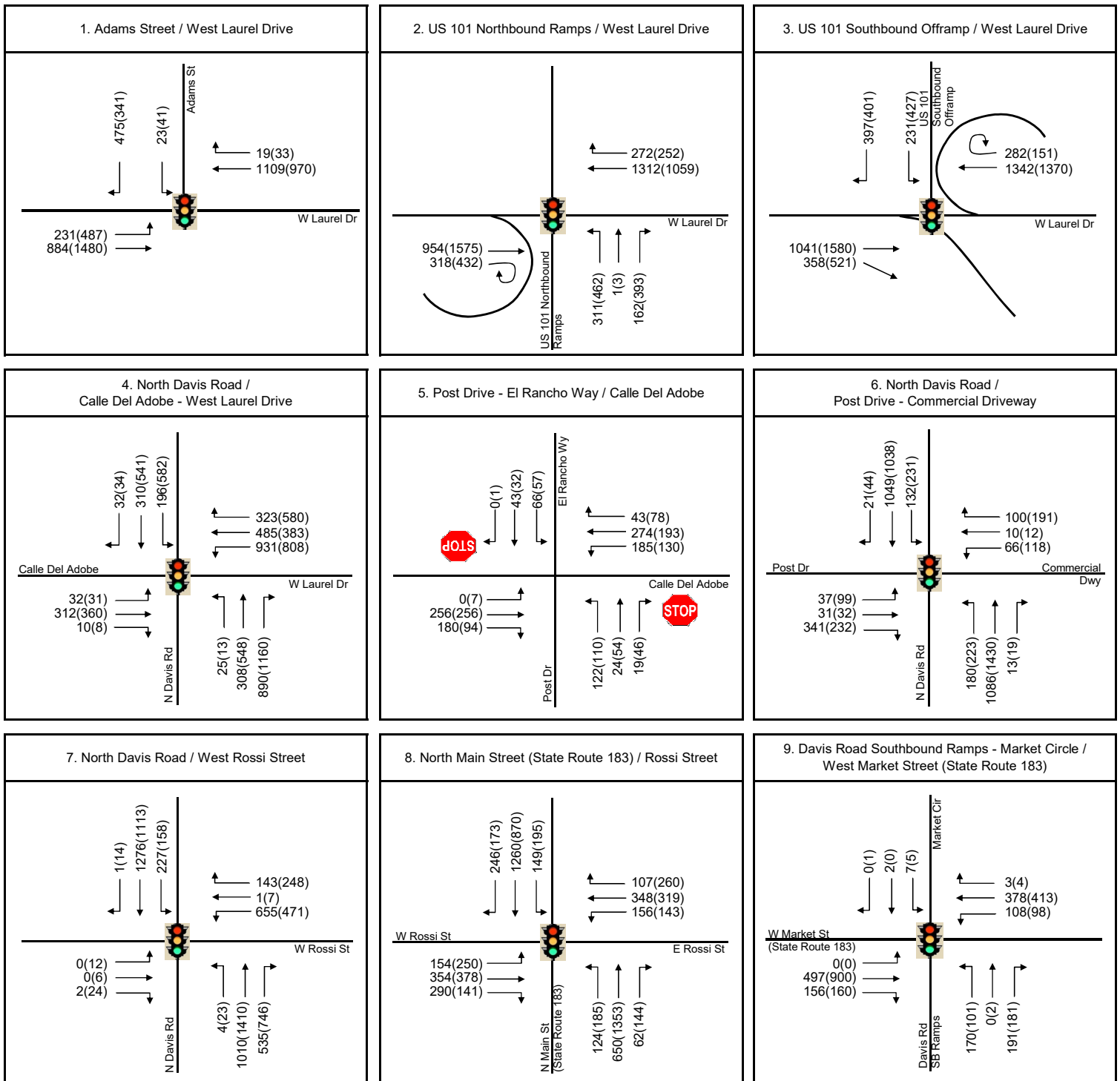
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Traffic Engineer

Exhibit 12
Background Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)



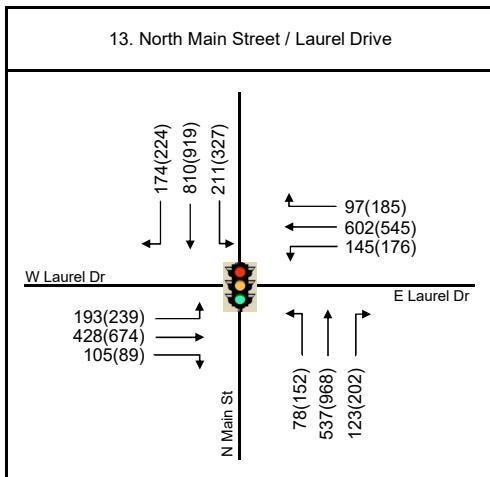
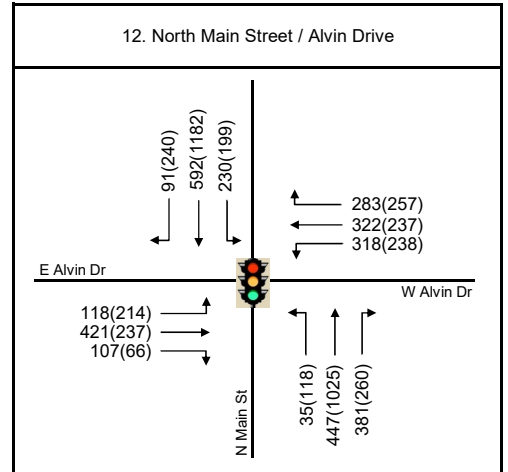
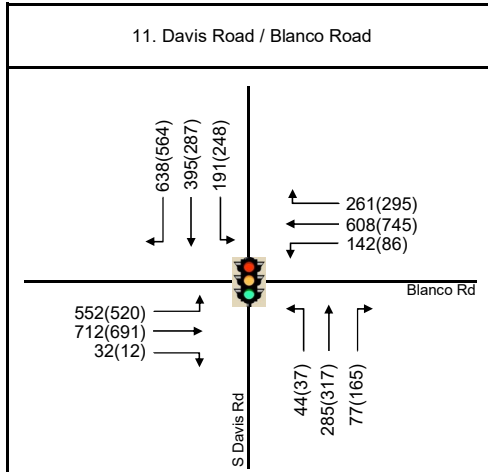
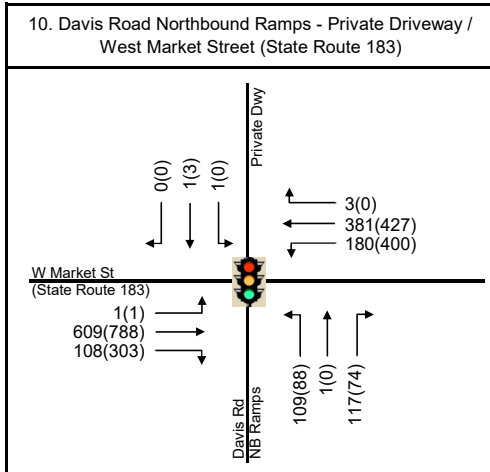
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Exhibit ?
Background Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)



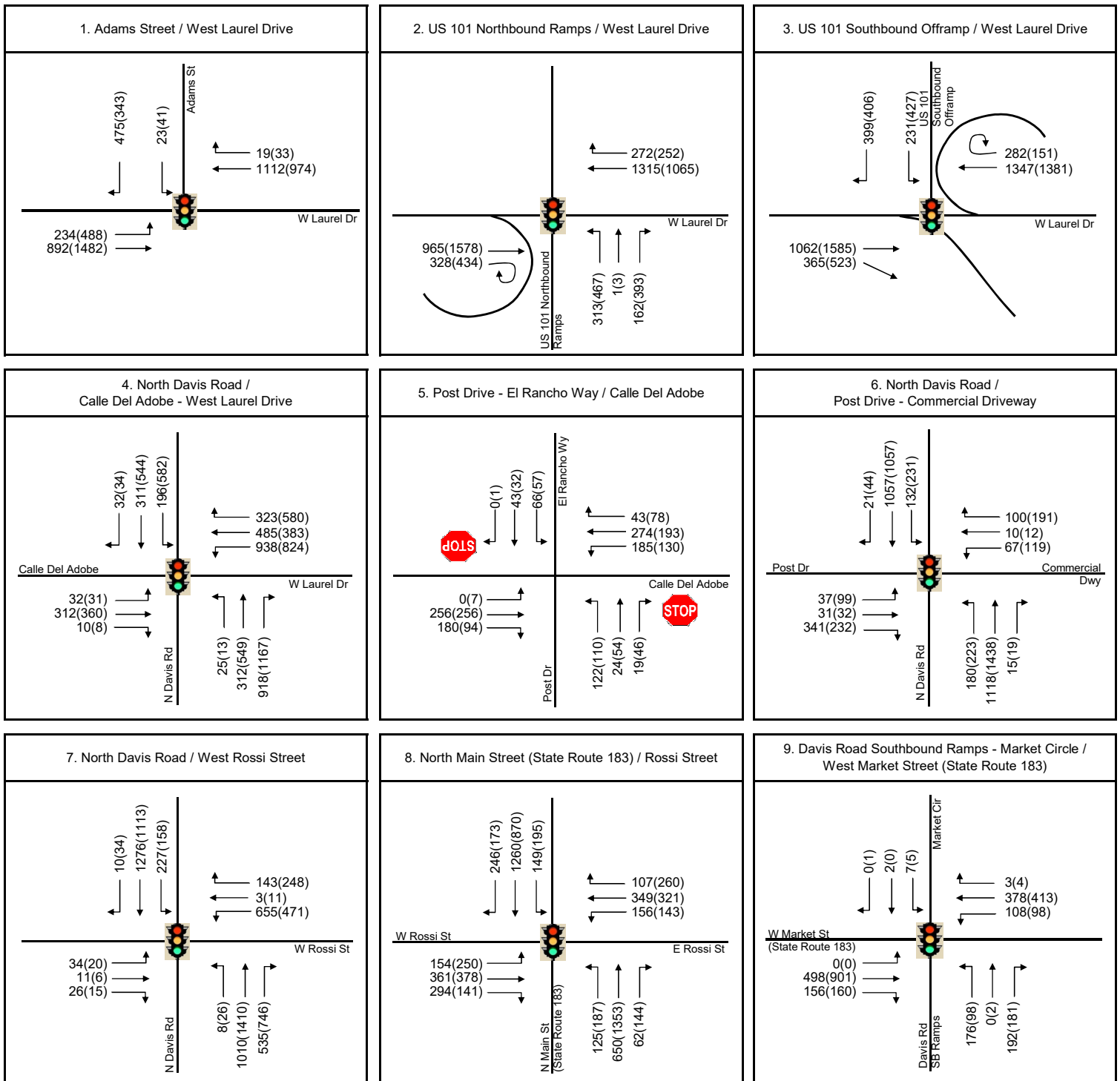
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Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



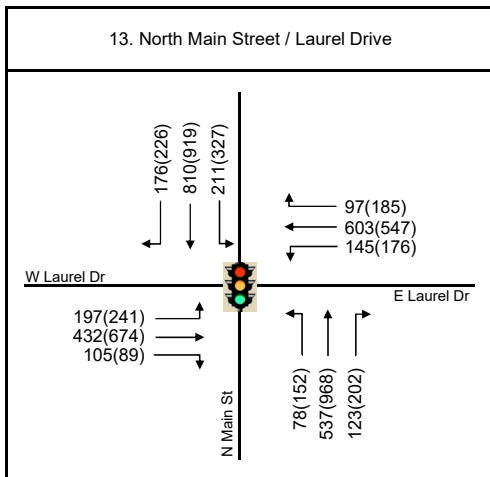
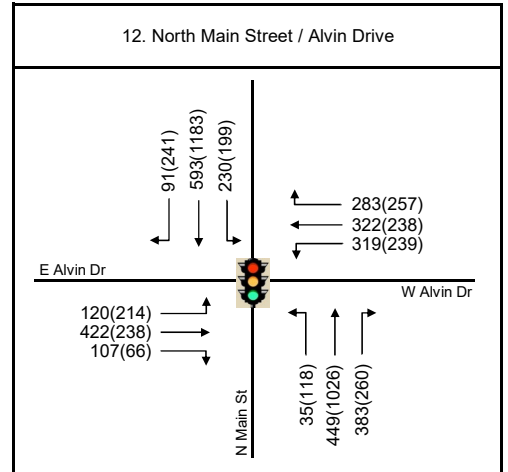
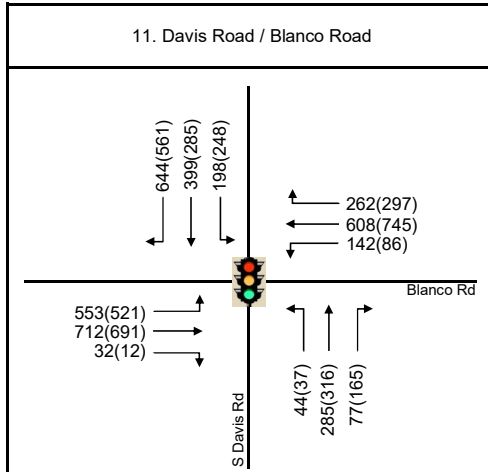
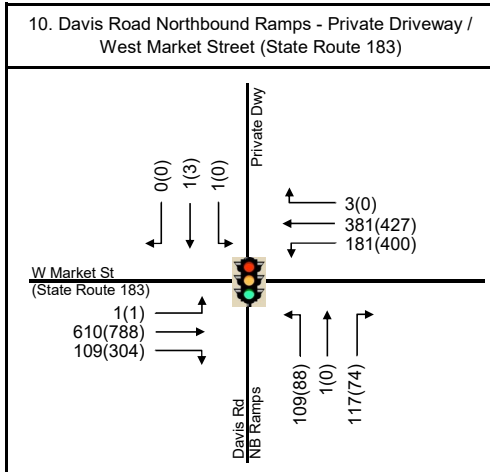
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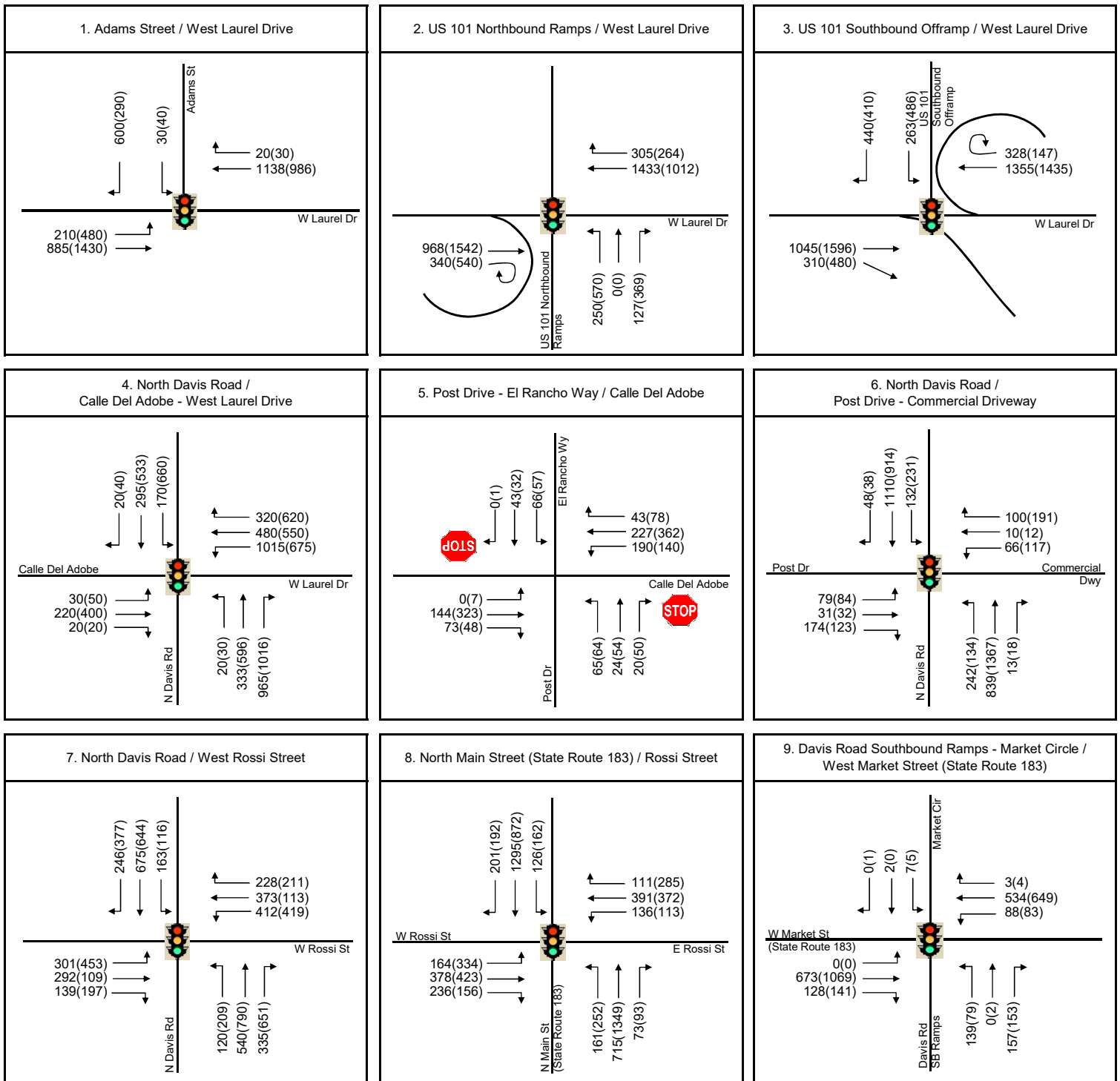
Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

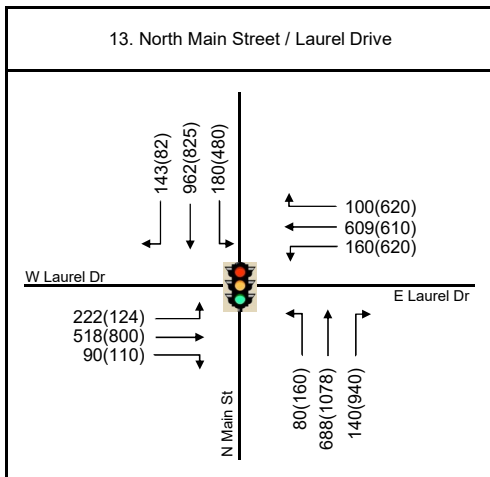
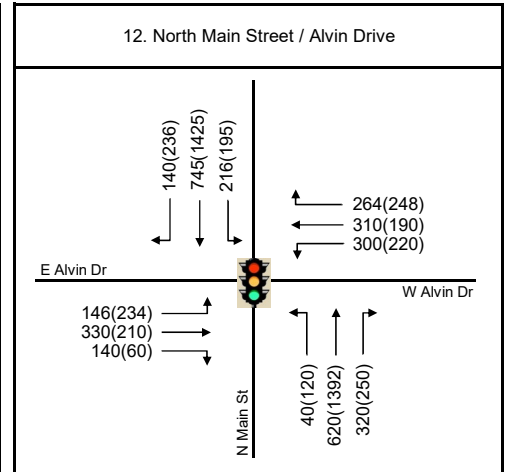
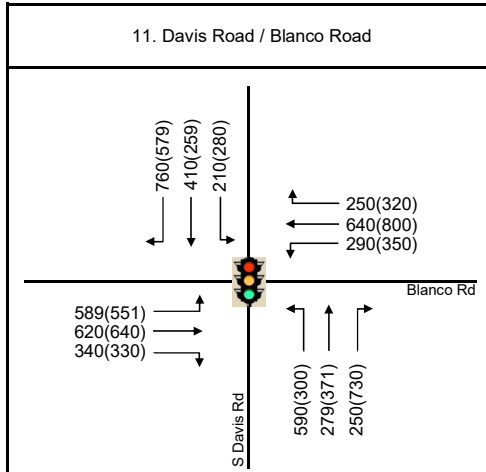
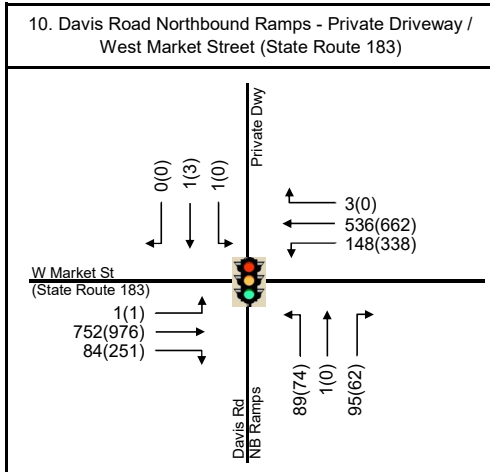


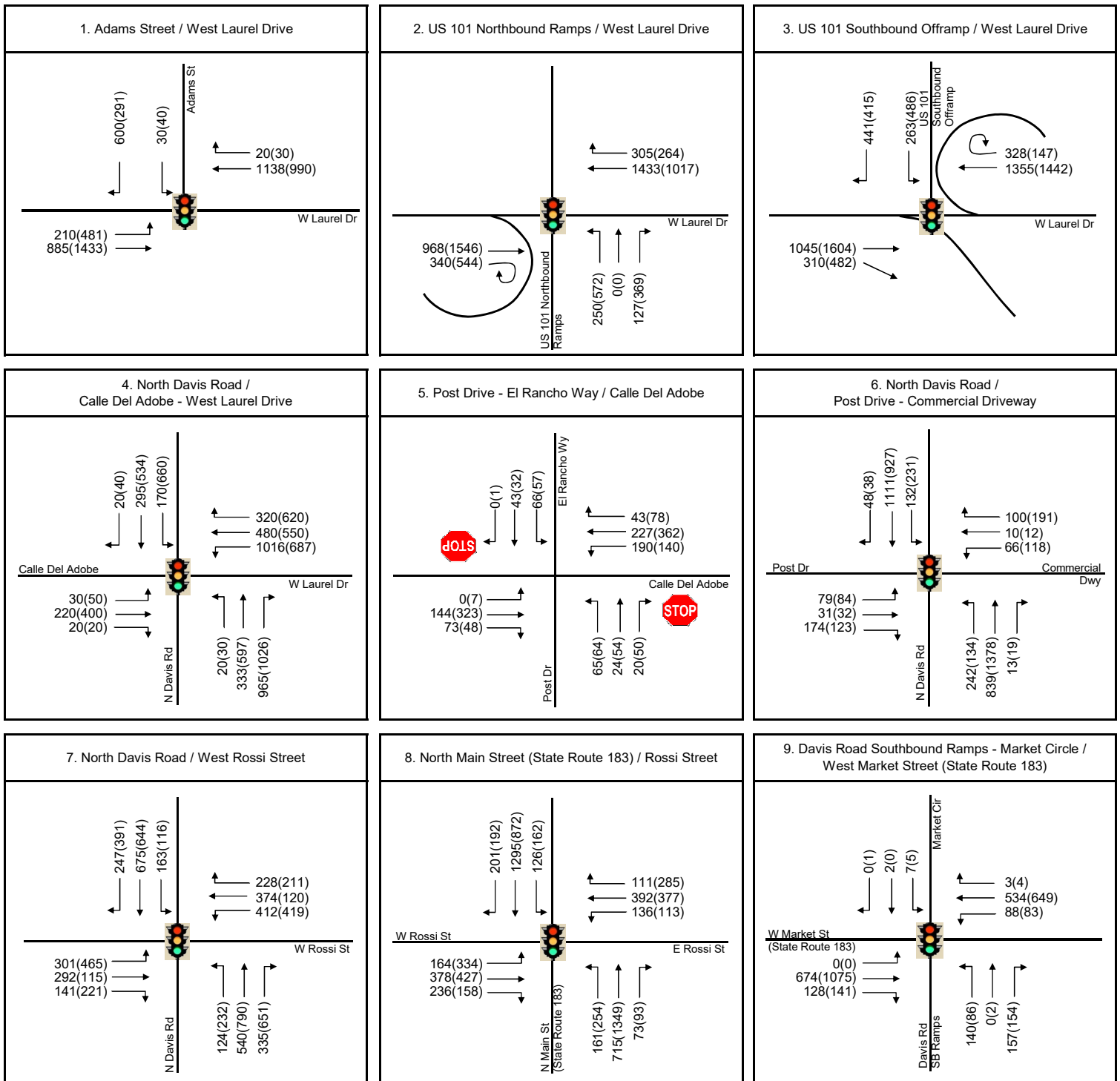
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Traffic Engineer

Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



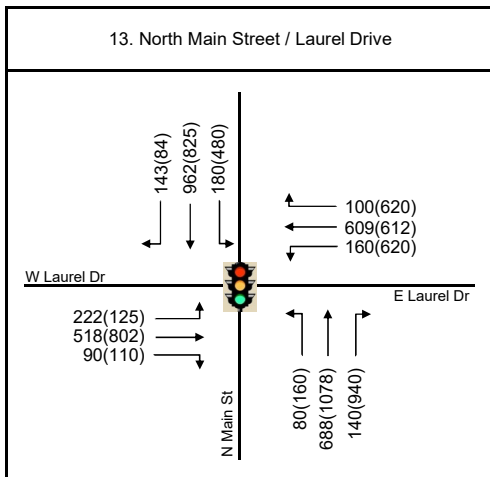
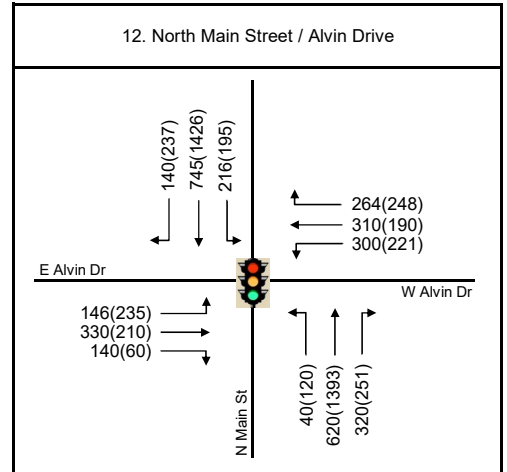
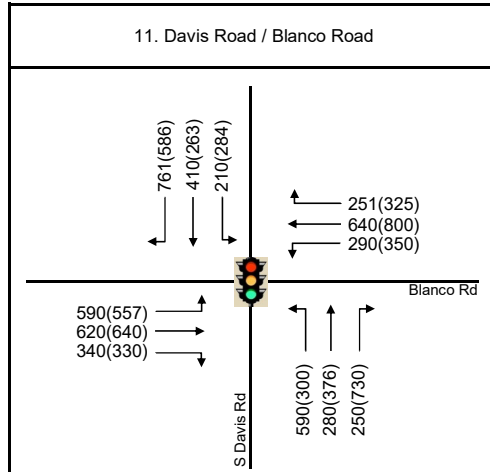
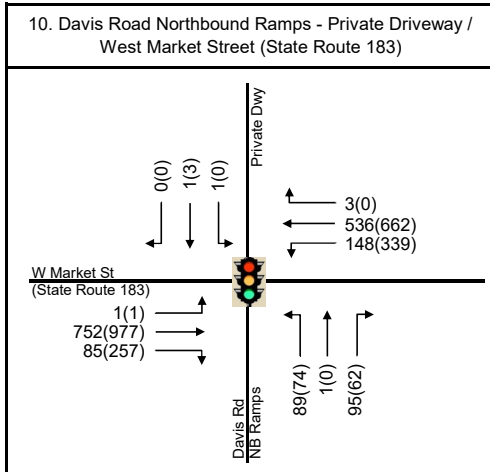






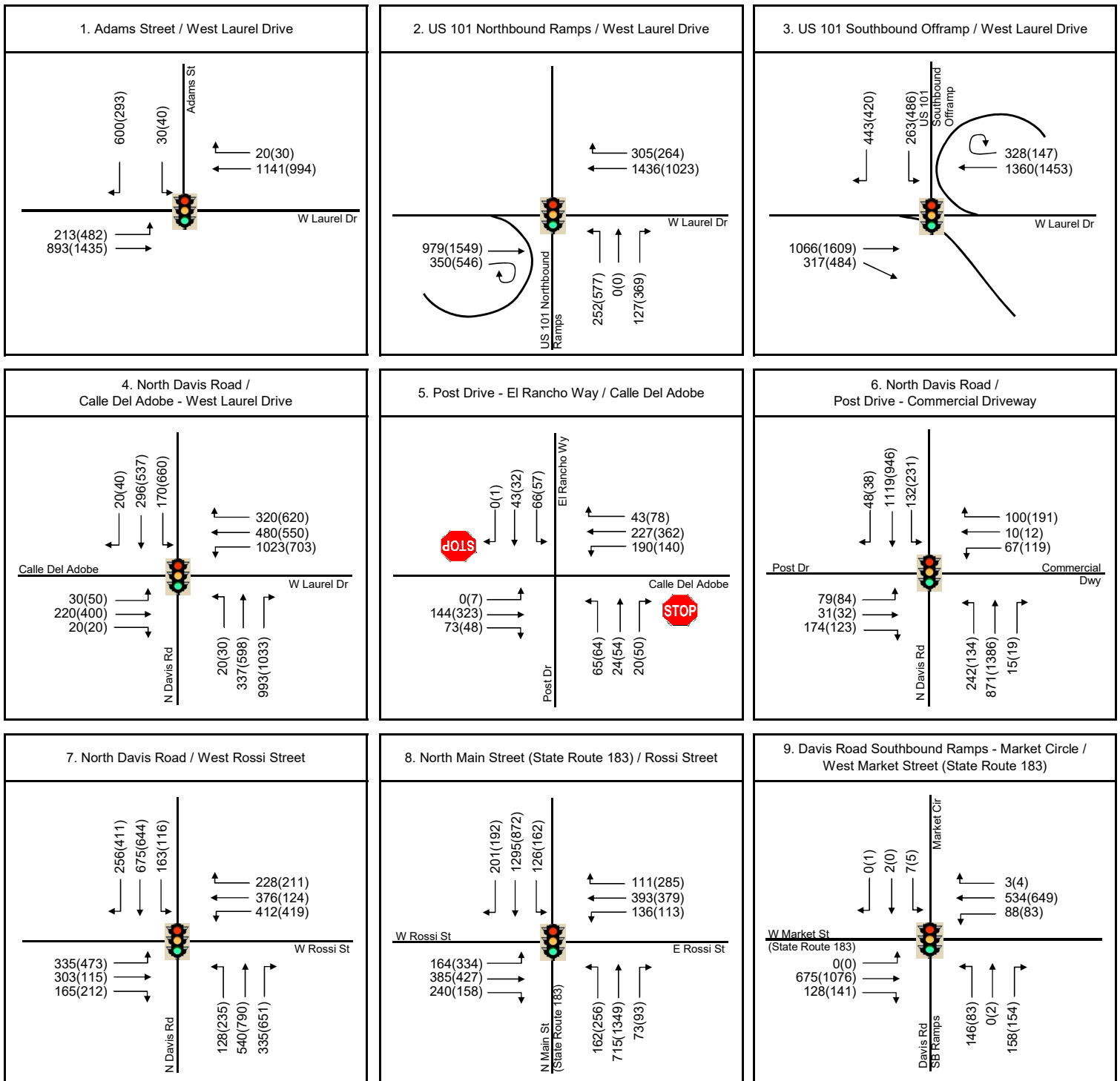
Keith Higgins
Traffic Engineer

Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)



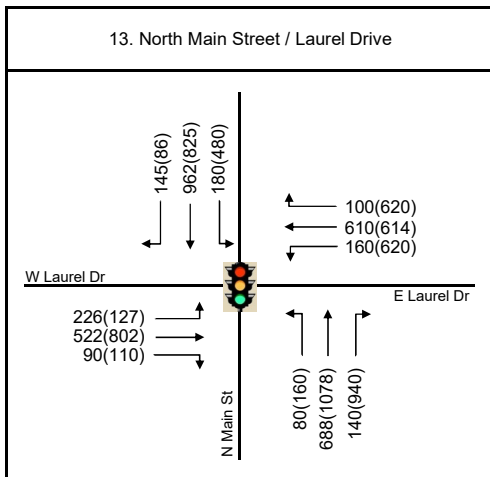
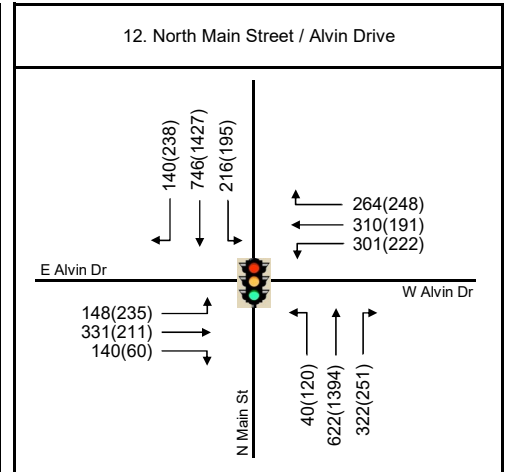
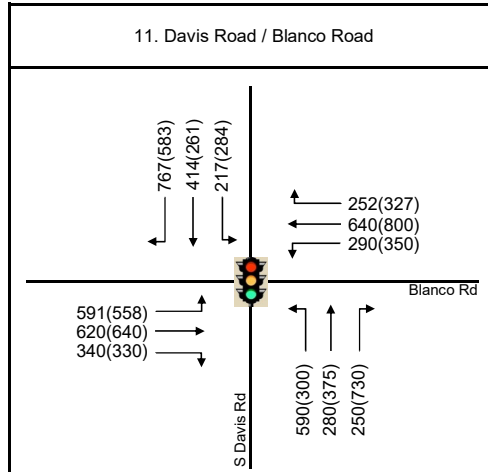
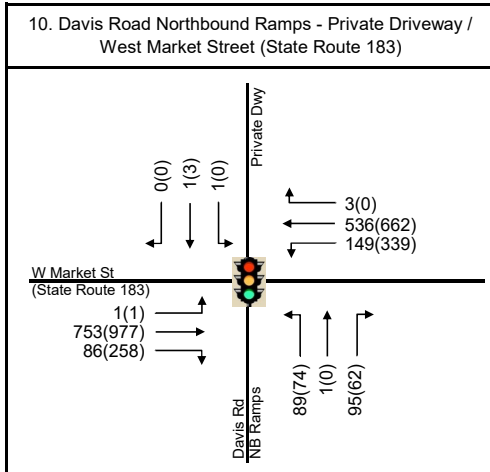
Keith Higgins
Traffic Engineer

Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)



Keith Higgins
Traffic Engineer

Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)



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Traffic Engineer

Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

Vehicle Trips - Ag Employee Housing Project Alternative

Employee Shuttles

Vehicle Type	Seating Capacity	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	32	33	66	15	miles	990
Van	15	8	16	15	miles	240
Subtotal:						1,230

Shuttle Trips Between Project Site and Storage Area

Vehicle Type	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	33	66	6	miles	400
Van	8	0	0	miles	0
Subtotal:					400

Total VMT: 1,630 per day
326,000 per year

If all ag employees drove personal cars (assuming two person per vehicle):

Driving VMT: 18,000 per day
3,600,000 per year

Notes:

1. Number of buses and vans provided by project applicant.
2. Fields are assumed to be an average of 15 miles from the project site.
3. Per the project applicant, buses will be stored at a location 6 miles away and vans will be stored on the project site.
4. VMT per year estimated using 200 working days per year.
5. Estimate for driving employee comparison assumes two employees per vehicles, which is equivalent to 600 total vehicles per the project definition.

Keith Higgins
Traffic Engineer

Exhibit 18A
Project Vehicle Miles Traveled
Calculation
(Ag Employee Housing)

Vehicle Miles Traveled - Apartments Project Alternative

Location	Percent of Net Project Traffic	Daily Project Traffic	Distance from Project (miles)	Vehicle Miles Traveled
Salinas	57%	834	2.50	2,085
Marina	5%	73	9.00	657
Seaside	3%	44	15.00	660
Monterey	10%	146	18.00	2,628
Prunedale	7%	102	8.00	816
Castroville	5%	73	8.00	584
Watsonville	4%	59	19.00	1,121
Gonzales	1%	14	19.00	266
Soledad	1%	15	28.00	420
Greenfield	1%	15	37.00	555
San Benito County	3%	44	27.00	1,188
Santa Clara County	3%	44	30.00	1,320
Total:	100%	1,463		12,300
Project Average Trip Length				8.4
Regional Average Home-Based Trip Length				8.9
Project Percent of Regional Average Home-Based Trip Length				94%
Apartment Occupants per Unit				3.73
Number of Apartments				200
Number of People Living in Apartments				746
Average Residential Vehicle-Miles Traveled (miles/resident):				16.5
Average AMBAG Region VMT per Capita				21.66
Project Percent of Regional VMT per Capita				76%

Notes:

1. Total daily net project residential trips cited from trip generation on **Exhibit 5**.
2. Apartment Occupants per Unit is average household size in Salinas in 2010 US Census, per the 2010 US Census (factfinder.census.gov).

Keith Higgins
Traffic Engineer

Exhibit 18B
Project Vehicle Miles Traveled
Calculation
(Apartments)

Appendix A

Level of Service

Descriptions

APPENDIX A1

LEVEL OF SERVICE (LOS) DESCRIPTION SIGNALIZED INTERSECTIONS

The capacity of an urban street is related primarily to the signal timing and the geometric characteristics of the facility as well as to the composition of traffic on the facility. Geometrics are a fixed characteristic of a facility. Thus, while traffic composition may vary somewhat over time, the capacity of a facility is generally a stable value that can be significantly improved only by initiating geometric improvements. A traffic signal essentially allocates time among conflicting traffic movements that seek to use the same space. The way in which time is allocated significantly affects the operation and the capacity of the intersection and its approaches.

The methodology for signalized intersection is designed to consider individual intersection approaches and individual lane groups within approaches. A lane group consists of one or more lanes on an intersection approach. The outputs from application of the method described in the HCM 2000 and 2010 are reported on the basis of each lane. For a given lane group at a signalized intersection, three indications are displayed: green, yellow and red. The red indication may include a short period during which all indications are red, referred to as an all-red interval and the yellow indication forms the change and clearance interval between two green phases.

The methodology for analyzing the capacity and level of service must consider a wide variety of prevailing conditions, including the amount and distribution of traffic movements, traffic composition, geometric characteristics, and details of intersection signalization. The methodology addresses the capacity, LOS, and other performance measures for lane groups and the intersection approaches and the LOS for the intersection as a whole.

Capacity is evaluated in terms of the ratio of demand flow rate to capacity (v/c ratio), whereas LOS is evaluated on the basis of control delay per vehicle (in seconds per vehicle). The methodology does not take into account the potential impact of downstream congestion on intersection operation, nor does the methodology detect and adjust for the impacts of turn-pocket overflows on through traffic and intersection operation.

LEVEL OF SERVICE (LOS) CRITERIA FOR SIGNALIZED INTERSECTIONS

(Reference 2000 and 2010 Highway Capacity Manuals)

Level of Service	Control Delay (seconds / vehicle)
A	<10
B	>10 - 20
C	>20 - 35
D	>35 - 55
E	>55 - 80
F	>80

APPENDIX A2

LEVEL OF SERVICE (LOS) DESCRIPTION UNSIGNALIZED INTERSECTIONS WITH TWO-WAY STOP CONTROL (TWSC)

TWSC intersections are widely used and stop signs are used to control vehicle movements at such intersections. At TWSC intersections, the stop-controlled approaches are referred to as the minor street approaches; they can be either public streets or private driveways. The intersection approaches that are not controlled by stop signs are referred to as the major street approaches. A three-leg intersection is considered to be a standard type of TWSC intersection if the single minor street approach (i.e. the stem of the T configuration) is controlled by a stop sign. Three-leg intersections where two of the three approaches are controlled by stop signs are a special form of unsignalized intersection control.

At TWSC intersections, drivers on the controlled approaches are required to select gaps in the major street flow through which to execute crossing or turning maneuvers on the basis of judgment. In the presence of a queue, each driver on the controlled approach must use some time to move into the front-of-queue position and prepare to evaluate gaps in the major street flow. Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction.

Thus, the capacity of the controlled legs is based on three factors:

- the distribution of gaps in the major street traffic stream;
- driver judgment in selecting gaps through which to execute the desired maneuvers; and
- the follow-up time required by each driver in a queue.

The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incident, control, traffic or geometric delay. Average control delay for any particular minor movement is a function of the capacity of the approach and the degree of saturation and referred to as level of service.

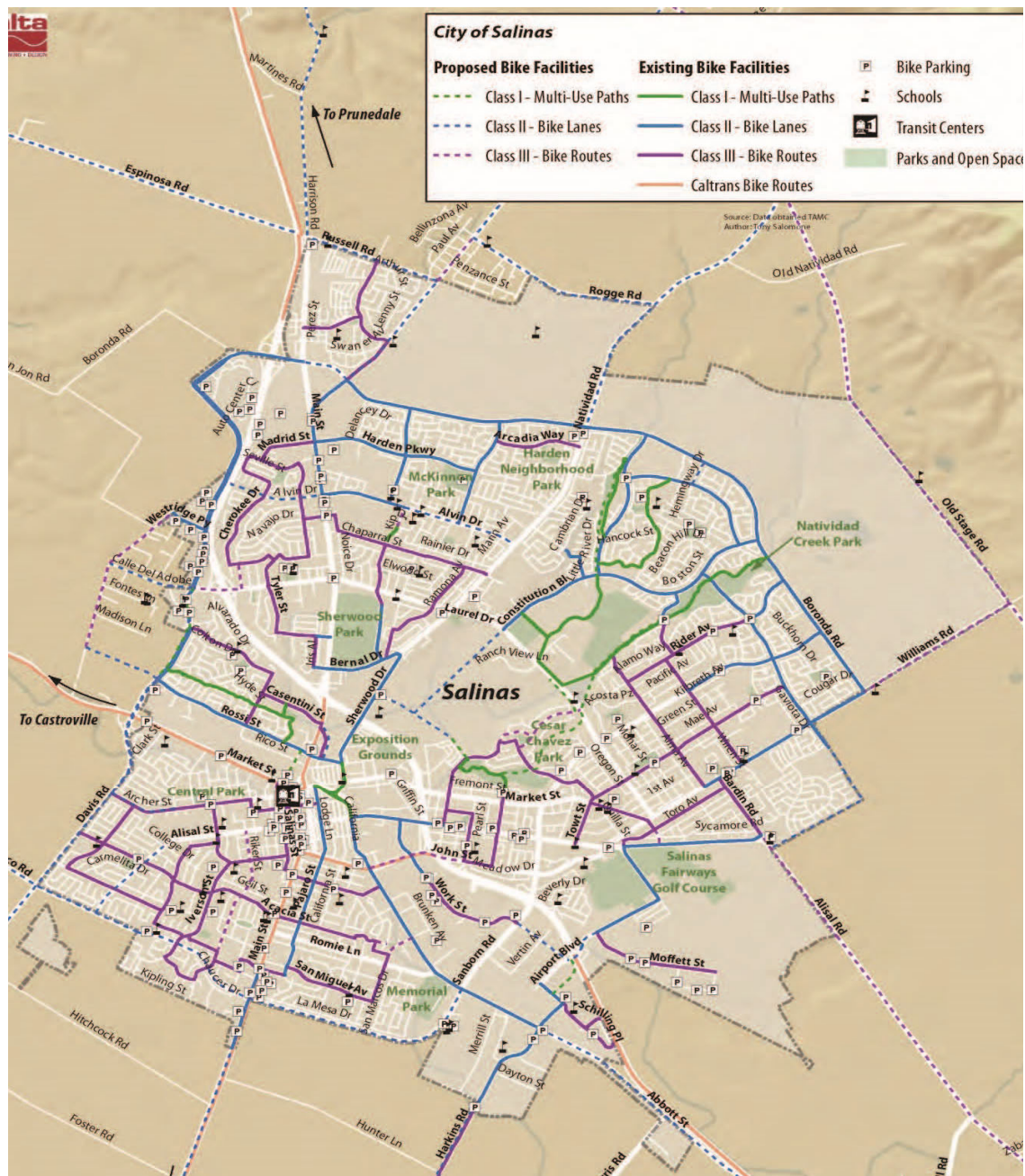
LEVEL OF SERVICE (LOS) CRITERIA FOR TWSC INTERSECTIONS

(Reference 2010 Highway Capacity Manual)

Level of Service	Control Delay (seconds / vehicle)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

Appendix B

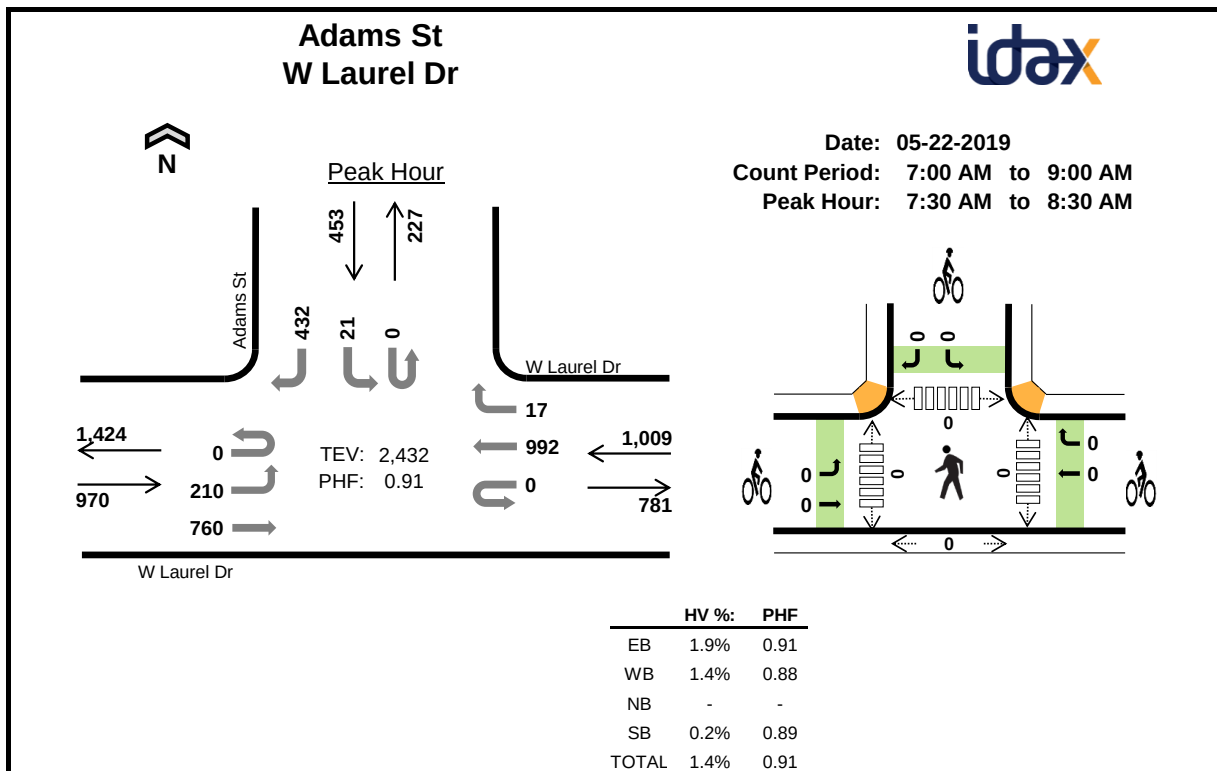
Existing and Proposed
Bicycle Facilities
near Project Site



Source: Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan, Alta Planning + Design, December 2011.

Appendix C

Intersection
Traffic Volume
Counts

**Two-Hour Count Summaries**

Interval Start		W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	24	110	0	0	0	181	4	0	0	0	0	0	5	0	86	410	0
7:15 AM		0	37	121	0	0	0	202	1	0	0	0	0	0	4	0	89	454	0
7:30 AM		0	35	159	0	0	0	225	4	0	0	0	0	0	5	0	116	544	0
7:45 AM		0	63	188	0	0	0	285	2	0	0	0	0	0	7	0	120	665	2,073
8:00 AM		0	49	210	0	0	0	270	6	0	0	0	0	0	5	0	115	655	2,318
8:15 AM		0	63	203	0	0	0	212	5	0	0	0	0	0	4	0	81	568	2,432
8:30 AM		0	58	173	0	0	0	163	1	0	0	0	0	0	5	0	77	477	2,365
8:45 AM		1	38	167	0	0	0	195	4	0	0	0	0	0	5	0	74	484	2,184
Count Total		1	367	1,331	0	0	0	1,733	27	0	0	0	0	0	40	0	758	4,257	0
Peak Hour	All	0	210	760	0	0	0	992	17	0	0	0	0	0	21	0	432	2,432	0
	HV	0	0	18	0	0	0	14	0	0	0	0	0	0	1	0	0	33	0
	HV%	-	0%	2%	-	-	-	1%	0%	-	-	-	-	-	5%	-	0%	1%	0

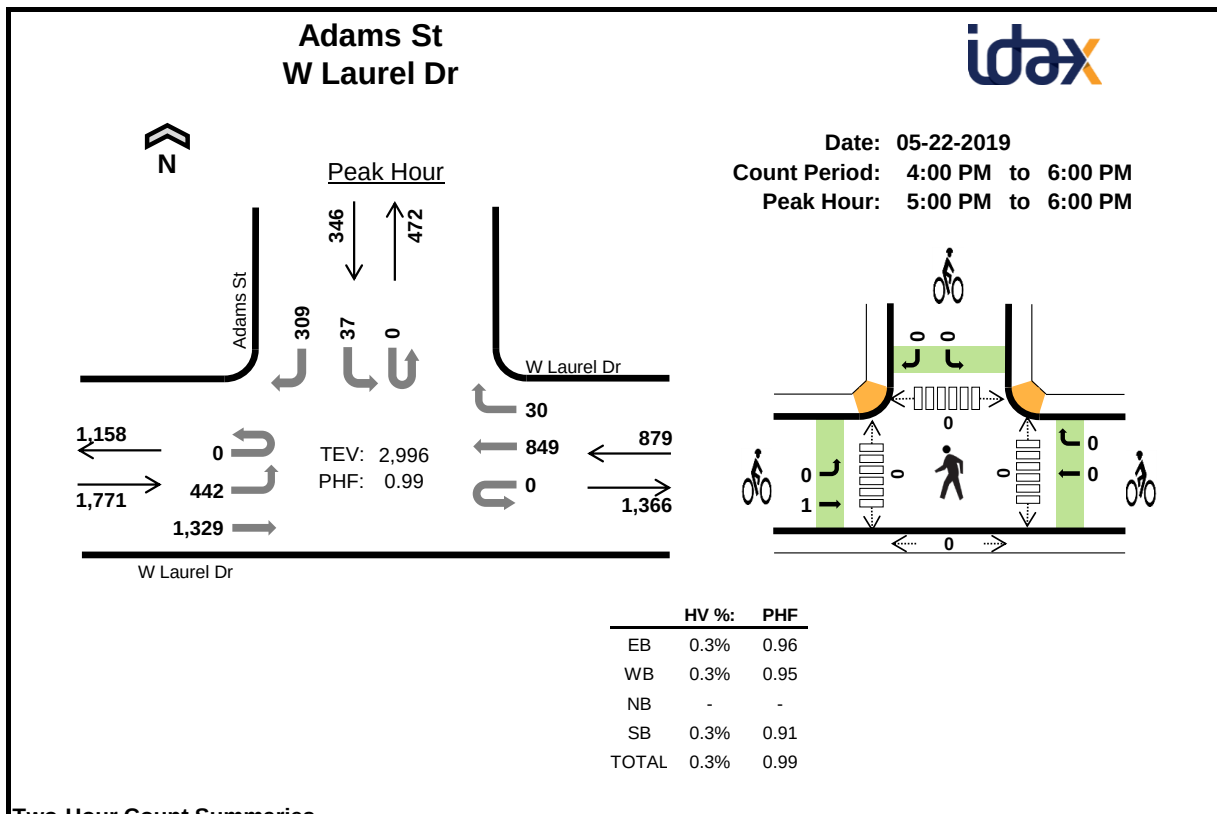
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	1	0	2	9	0	0	0	0	0	0	0	0	0	0
7:15 AM	6	2	0	2	10	0	0	0	0	0	0	0	0	0	0
7:30 AM	4	2	0	1	7	0	0	0	0	0	0	0	0	0	0
7:45 AM	6	5	0	0	11	0	0	0	0	0	0	0	0	0	0
8:00 AM	4	5	0	0	9	0	0	0	0	0	0	0	0	0	0
8:15 AM	4	2	0	0	6	0	0	0	0	0	0	0	0	0	0
8:30 AM	4	3	0	0	7	0	0	0	0	0	0	0	0	0	0
8:45 AM	4	7	0	1	12	1	1	0	0	2	0	0	0	0	0
Count Total	38	27	0	6	71	1	1	0	0	2	0	0	0	0	0
Peak Hr	18	14	0	1	33	0	0	0	0	0	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	1	5	0	0	0	1	0	0	0	0	0	0	0	0	0	2	9	0
7:15 AM	0	1	5	0	0	0	2	0	0	0	0	0	0	0	0	0	2	10	0
7:30 AM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	1	0	0	7	0
7:45 AM	0	0	6	0	0	0	5	0	0	0	0	0	0	0	0	0	0	11	37
8:00 AM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9	37
8:15 AM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6	33
8:30 AM	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	7	33
8:45 AM	0	1	3	0	0	0	7	0	0	0	0	0	0	0	0	0	1	12	34
Count Total	0	4	34	0	0	0	27	0	0	0	0	0	0	0	1	0	5	71	0
Peak Hour	0	0	18	0	0	0	14	0	0	0	0	0	0	0	1	0	0	33	0

Two-Hour Count Summaries - Bikes																			
Interval Start	W Laurel Dr			W Laurel Dr			n/a			Adams St						15-min Total	Rolling One Hour		
	Eastbound			Westbound			Northbound			Southbound									
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2
Count Total	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	78	269	0	0	0	207	5	0	0	0	0	0	9	0	73	641	0
4:15 PM		0	100	289	0	0	0	199	5	0	0	0	0	0	7	0	73	673	0
4:30 PM		0	108	352	0	0	0	237	1	0	0	0	0	0	6	0	63	767	0
4:45 PM		0	110	322	0	0	0	204	6	0	0	0	0	0	11	0	71	724	2,805
5:00 PM		0	114	329	0	0	0	213	9	0	0	0	0	0	9	0	77	751	2,915
5:15 PM		0	121	340	0	0	0	207	6	0	0	0	0	0	9	0	70	753	2,995
5:30 PM		0	106	332	0	0	0	228	3	0	0	0	0	0	11	0	75	755	2,983
5:45 PM		0	101	328	0	0	0	201	12	0	0	0	0	0	8	0	87	737	2,996
Count Total		0	838	2,561	0	0	0	1,696	47	0	0	0	0	0	70	0	589	5,801	0
Peak Hour	All	0	442	1,329	0	0	0	849	30	0	0	0	0	0	37	0	309	2,996	0
	HV	0	1	4	0	0	0	3	0	0	0	0	0	0	0	0	1	9	0
	HV%	-	0%	0%	-	-	-	0%	0%	-	-	-	-	-	0%	-	0%	0%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

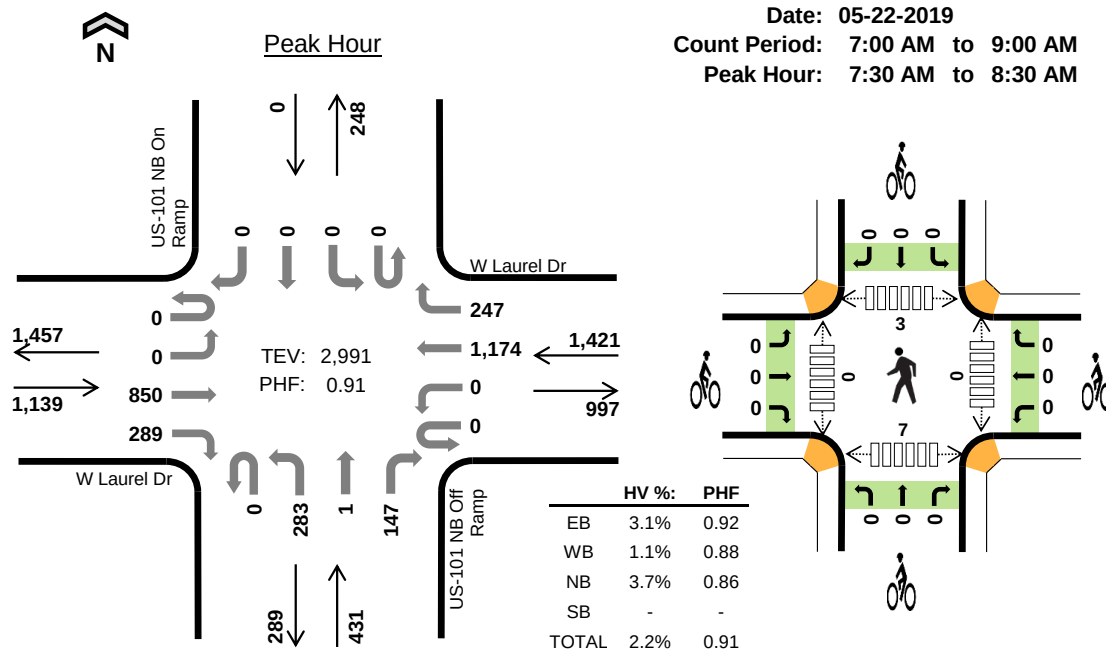
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	2	0	1	5	0	0	0	0	0	0	0	0	0	0
4:15 PM	2	3	0	0	5	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	2	2	0	0	4	1	0	0	0	1	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0
Count Total	11	13	0	2	26	1	0	0	0	1	0	0	0	0	0
Peak Hr	5	3	0	1	9	1	0	0	0	1	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	1	5	0
4:15 PM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	17
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13
5:15 PM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4	12
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	8
5:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	9
Count Total	0	2	9	0	0	0	13	0	0	0	0	0	0	0	0	0	2	26	0
Peak Hour	0	1	4	0	0	0	3	0	0	0	0	0	0	0	0	0	1	9	0

Two-Hour Count Summaries - Bikes																		
Interval Start	W Laurel Dr			W Laurel Dr			n/a			Adams St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 NB Off Ramp W Laurel Dr



Two-Hour Count Summaries

Interval Start	W Laurel Dr Eastbound				W Laurel Dr Westbound				US-101 NB Off Ramp Northbound				US-101 NB On Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	118	50	0	0	199	74	0	30	0	19	0	0	0	0	490	0
7:15 AM	0	0	132	61	0	0	217	76	0	49	0	20	0	0	0	0	555	0
7:30 AM	0	0	165	78	0	0	260	77	0	45	0	33	0	0	0	0	658	0
7:45 AM	0	0	236	64	0	0	346	60	0	80	0	36	0	0	0	0	822	2,525
8:00 AM	0	0	224	61	0	0	316	61	0	86	1	39	0	0	0	0	788	2,823
8:15 AM	0	0	225	86	0	0	252	49	0	72	0	39	0	0	0	0	723	2,991
8:30 AM	0	0	193	77	0	0	180	52	0	55	0	34	0	0	0	0	591	2,924
8:45 AM	0	0	196	60	0	0	197	41	0	74	1	31	0	0	0	0	600	2,702
Count Total	0	0	1,489	537	0	0	1,967	490	0	491	2	251	0	0	0	0	5,227	0
Peak Hour	All	0	0	850	289	0	0	1,174	247	0	283	1	147	0	0	0	2,991	0
	HV	0	0	16	19	0	0	14	2	0	13	0	3	0	0	0	67	0
	HV%	-	-	2%	7%	-	-	1%	1%	-	5%	0%	2%	-	-	-	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

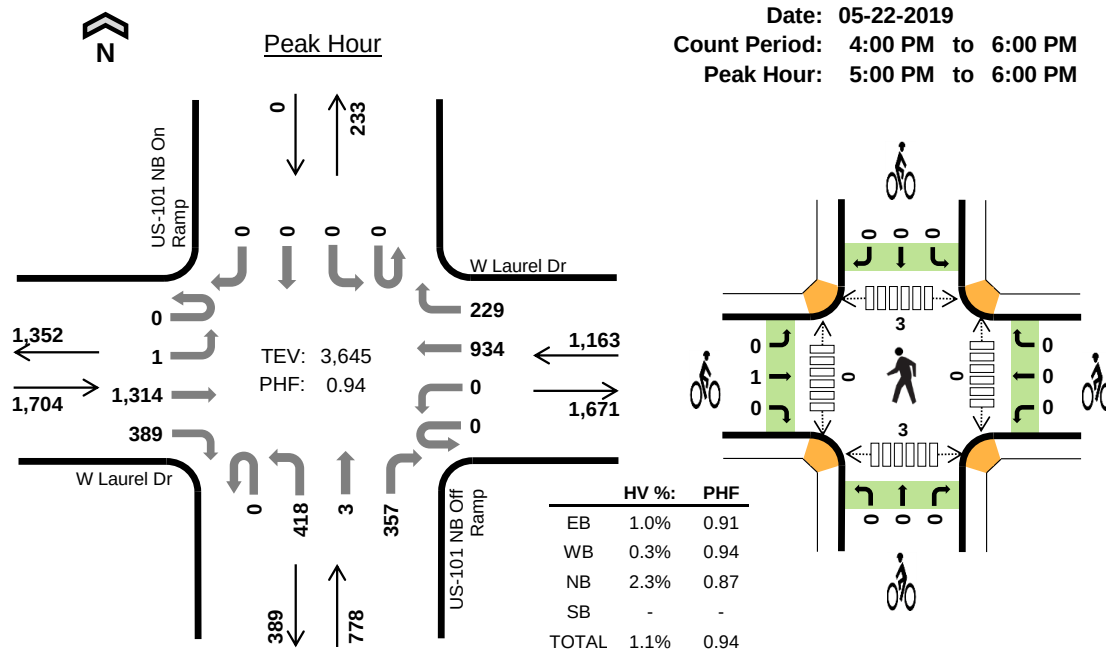
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	9	3	2	0	14	0	0	0	0	0	0	0	1	0	1
7:15 AM	5	4	3	0	12	0	0	0	0	0	0	0	0	1	1
7:30 AM	6	2	2	0	10	0	0	0	0	0	0	0	0	4	4
7:45 AM	11	5	5	0	21	0	0	0	0	0	0	0	0	2	2
8:00 AM	7	6	6	0	19	0	0	0	0	0	0	0	2	0	2
8:15 AM	11	3	3	0	17	0	0	0	0	0	0	0	1	1	2
8:30 AM	12	4	3	0	19	0	0	0	0	0	0	0	0	1	1
8:45 AM	7	8	4	0	19	1	0	0	0	1	0	0	2	1	3
Count Total	68	35	28	0	131	1	0	0	0	1	0	0	6	10	16
Peak Hour	35	16	16	0	67	0	0	0	0	0	0	0	3	7	10

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	W Laurel Dr				W Laurel Dr				US-101 NB Off Ramp				US-101 NB On Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	3	0	0	3	0	0	2	0	0	0	0	0	0	14	0
7:15 AM	0	0	5	0	0	0	2	2	0	3	0	0	0	0	0	0	12	0
7:30 AM	0	0	3	3	0	0	1	1	0	1	0	1	0	0	0	0	10	0
7:45 AM	0	0	5	6	0	0	5	0	0	5	0	0	0	0	0	0	21	57
8:00 AM	0	0	2	5	0	0	5	1	0	4	0	2	0	0	0	0	19	62
8:15 AM	0	0	6	5	0	0	3	0	0	3	0	0	0	0	0	0	17	67
8:30 AM	0	0	5	7	0	0	2	2	0	3	0	0	0	0	0	0	19	76
8:45 AM	0	0	5	2	0	0	3	5	0	4	0	0	0	0	0	0	19	74
Count Total	0	0	37	31	0	0	24	11	0	25	0	3	0	0	0	0	131	0
Peak Hour	0	0	16	19	0	0	14	2	0	13	0	3	0	0	0	0	67	0

Two-Hour Count Summaries - Bikes																		
Interval Start	W Laurel Dr			W Laurel Dr			US-101 NB Off Ramp			US-101 NB On Ramp			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1				
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 NB Off Ramp W Laurel Dr



Two-Hour Count Summaries

Interval Start		W Laurel Dr				W Laurel Dr				US-101 NB Off Ramp				US-101 NB On Ramp				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	288	90	0	0	235	54	0	114	0	67	0	0	0	0	848	0
4:15 PM		0	0	245	76	0	0	211	52	0	93	1	65	0	0	0	0	743	0
4:30 PM		0	0	257	93	0	0	209	73	0	109	1	84	0	0	0	0	826	0
4:45 PM		0	0	292	83	0	0	231	55	0	117	0	94	0	0	0	0	872	3,289
5:00 PM		0	0	280	96	0	0	242	44	0	115	2	96	0	0	0	0	875	3,316
5:15 PM		0	0	345	122	0	0	209	72	0	122	0	102	0	0	0	0	972	3,545
5:30 PM		0	1	335	93	0	0	244	64	0	93	1	85	0	0	0	0	916	3,635
5:45 PM		0	0	354	78	0	0	239	49	0	88	0	74	0	0	0	0	882	3,645
Count Total		0	1	2,396	731	0	0	1,820	463	0	851	5	667	0	0	0	0	6,934	0
Peak Hour	All	0	1	1,314	389	0	0	934	229	0	418	3	357	0	0	0	0	3,645	0
	HV	0	0	5	12	0	0	4	0	0	18	0	0	0	0	0	0	39	0
	HV%	-	0%	0%	3%	-	-	0%	0%	-	4%	0%	0%	-	-	-	-	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

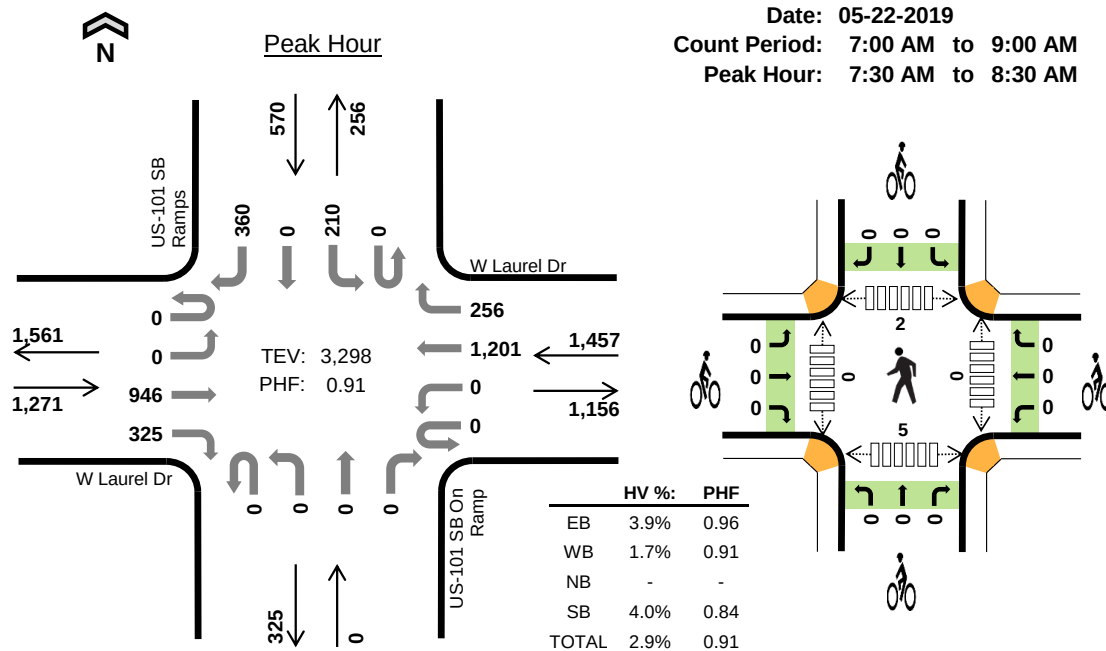
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	4	5	0	11	0	0	0	0	0	0	0	1	3	4
4:15 PM	4	3	2	0	9	0	0	0	0	0	0	0	1	3	4
4:30 PM	3	4	5	0	12	0	0	0	0	0	0	0	1	1	2
4:45 PM	2	1	6	0	9	0	0	0	0	0	0	0	1	0	1
5:00 PM	7	0	9	0	16	0	0	0	0	0	0	0	2	0	2
5:15 PM	4	2	4	0	10	1	0	0	0	1	0	0	0	1	1
5:30 PM	3	1	2	0	6	0	0	0	0	0	0	0	1	1	2
5:45 PM	3	1	3	0	7	0	0	0	0	0	0	0	0	1	1
Count Total	28	16	36	0	80	1	0	0	0	1	0	0	7	10	17
Peak Hour	17	4	18	0	39	1	0	0	0	1	0	0	3	3	6

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	W Laurel Dr				W Laurel Dr				US-101 NB Off Ramp				US-101 NB On Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	1	0	0	4	0	0	4	0	1	0	0	0	0	11	0
4:15 PM	0	0	2	2	0	0	3	0	0	2	0	0	0	0	0	0	9	0
4:30 PM	0	0	1	2	0	0	2	2	0	5	0	0	0	0	0	0	12	0
4:45 PM	0	0	1	1	0	0	1	0	0	6	0	0	0	0	0	0	9	41
5:00 PM	0	0	2	5	0	0	0	0	0	9	0	0	0	0	0	0	16	46
5:15 PM	0	0	1	3	0	0	2	0	0	4	0	0	0	0	0	0	10	47
5:30 PM	0	0	0	3	0	0	1	0	0	2	0	0	0	0	0	0	6	41
5:45 PM	0	0	2	1	0	0	1	0	0	3	0	0	0	0	0	0	7	39
Count Total	0	0	10	18	0	0	14	2	0	35	0	1	0	0	0	0	80	0
Peak Hour	0	0	5	12	0	0	4	0	0	18	0	0	0	0	0	0	39	0

Two-Hour Count Summaries - Bikes																		
Interval Start	W Laurel Dr			W Laurel Dr			US-101 NB Off Ramp			US-101 NB On Ramp			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0				
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 SB On Ramp W Laurel Dr



Two-Hour Count Summaries

Interval Start		W Laurel Dr				W Laurel Dr				US-101 SB On Ramp				US-101 SB Ramps				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	122	57	0	0	182	44	0	0	0	0	0	45	0	63	513	0
7:15 AM		0	0	154	67	0	0	205	54	0	0	0	0	0	46	0	79	605	0
7:30 AM		0	0	208	88	0	0	232	71	0	0	0	0	0	38	0	95	732	0
7:45 AM		0	0	240	92	0	0	314	87	0	0	0	0	0	64	0	106	903	2,753
8:00 AM		0	0	237	76	0	0	335	51	0	0	0	0	0	57	0	91	847	3,087
8:15 AM		0	0	261	69	0	0	320	47	0	0	0	0	0	51	0	68	816	3,298
8:30 AM		0	0	240	54	0	0	209	31	0	0	0	0	0	41	0	80	655	3,221
8:45 AM		0	0	204	76	0	0	227	35	0	0	0	0	0	44	0	64	650	2,968
Count Total		0	0	1,666	579	0	0	2,024	420	0	0	0	0	0	386	0	646	5,721	0
Peak Hour	All	0	0	946	325	0	0	1,201	256	0	0	0	0	0	210	0	360	3,298	0
	HV	0	0	31	18	0	0	25	0	0	0	0	0	0	1	0	22	97	0
	HV%	-	-	3%	6%	-	-	2%	0%	-	-	-	-	-	0%	-	6%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	4	0	9	19	0	0	0	0	0	0	0	3	0	3
7:15 AM	8	6	0	6	20	0	0	0	0	0	0	0	0	3	3
7:30 AM	11	2	0	0	13	0	0	0	0	0	0	0	0	2	2
7:45 AM	11	9	0	7	27	0	0	0	0	0	0	0	1	1	2
8:00 AM	16	9	0	6	31	0	0	0	0	0	0	0	0	1	1
8:15 AM	11	5	0	10	26	0	0	0	0	0	0	0	1	1	2
8:30 AM	17	4	0	10	31	0	0	0	0	0	0	0	0	1	1
8:45 AM	14	7	0	4	25	0	0	0	0	0	0	0	1	1	2
Count Total	94	46	0	52	192	0	0	0	0	0	0	0	6	10	16
Peak Hour	49	25	0	23	97	0	0	0	0	0	0	0	2	5	7

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	W Laurel Dr				W Laurel Dr				US-101 SB On Ramp				US-101 SB Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	0	0	0	3	1	0	0	0	0	0	4	0	5	19	0
7:15 AM	0	0	4	4	0	0	6	0	0	0	0	0	0	2	0	4	20	0
7:30 AM	0	0	8	3	0	0	2	0	0	0	0	0	0	0	0	0	13	0
7:45 AM	0	0	7	4	0	0	9	0	0	0	0	0	0	1	0	6	27	79
8:00 AM	0	0	8	8	0	0	9	0	0	0	0	0	0	0	0	6	31	91
8:15 AM	0	0	8	3	0	0	5	0	0	0	0	0	0	0	0	10	26	97
8:30 AM	0	0	10	7	0	0	4	0	0	0	0	0	0	2	0	8	31	115
8:45 AM	0	0	7	7	0	0	7	0	0	0	0	0	0	0	0	4	25	113
Count Total	0	0	58	36	0	0	45	1	0	0	0	0	0	9	0	43	192	0
Peak Hour	0	0	31	18	0	0	25	0	0	0	0	0	0	1	0	22	97	0

Two-Hour Count Summaries - Bikes																		
Interval Start	W Laurel Dr			W Laurel Dr			US-101 SB On Ramp			US-101 SB Ramps			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	W Laurel Dr				W Laurel Dr				US-101 SB On Ramp				US-101 SB Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	5	0	0	8	1	0	0	0	0	0	1	0	2	19	0
4:15 PM	0	0	4	4	0	0	5	0	0	0	0	0	0	0	0	2	15	0
4:30 PM	0	0	2	4	0	0	7	0	0	0	0	0	0	1	0	2	16	0
4:45 PM	0	0	2	2	0	0	6	1	0	0	0	0	0	0	0	5	16	66
5:00 PM	0	0	7	8	0	0	8	0	0	0	0	0	0	0	0	6	29	76
5:15 PM	0	0	4	6	0	0	7	0	0	0	0	0	0	0	0	2	19	80
5:30 PM	0	0	2	6	0	0	3	1	0	0	0	0	0	1	0	0	13	77
5:45 PM	0	0	3	2	0	0	4	1	0	0	0	0	0	0	0	4	14	75
Count Total	0	0	26	37	0	0	48	4	0	0	0	0	0	3	0	23	141	0
Peak Hour	0	0	16	22	0	0	22	2	0	0	0	0	0	1	0	12	75	0

Two-Hour Count Summaries - Bikes																		
Interval Start	W Laurel Dr			W Laurel Dr			US-101 SB On Ramp			US-101 SB Ramps			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Count Total	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
Peak Hour	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	

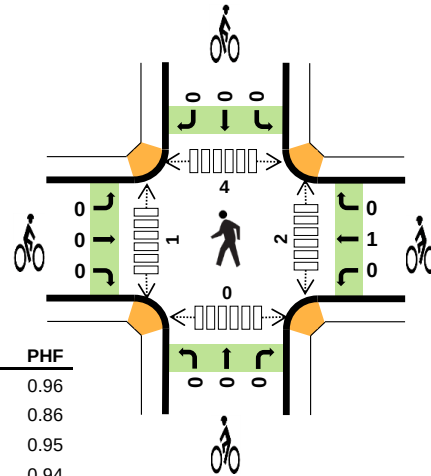
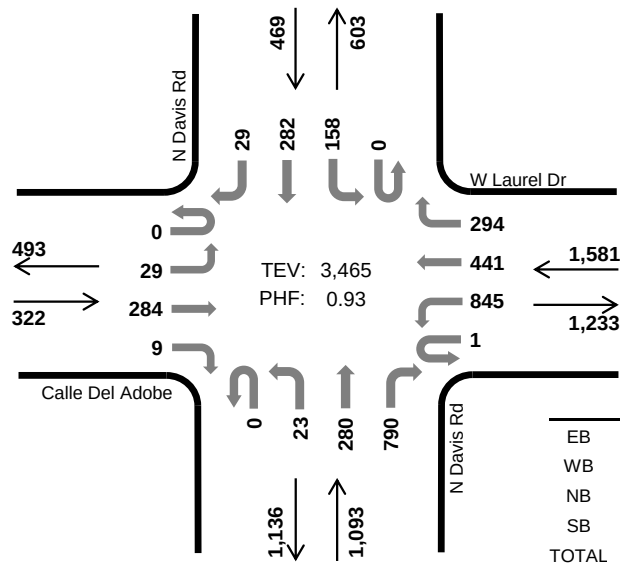
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Davis Rd Calle Del Adobe



Peak Hour

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	8.1%	0.96
WB	2.7%	0.86
NB	2.8%	0.95
SB	3.6%	0.94
TOTAL	3.4%	0.93

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	0	36	1	0	161	48	39	0	1	29	124	0	20	46	3	508	0
	7:15 AM	0	2	54	0	0	164	46	52	0	4	55	131	0	33	47	4	592	0
	7:30 AM	0	5	68	0	1	194	66	50	0	4	57	202	0	31	75	12	765	0
	7:45 AM	0	8	74	2	0	233	144	69	0	8	72	209	0	34	78	4	935	2,800
	8:00 AM	0	7	74	2	0	236	140	81	0	11	70	172	0	44	60	6	903	3,195
	8:15 AM	0	9	68	5	0	182	91	94	0	0	81	207	0	49	69	7	862	3,465
	8:30 AM	0	4	49	2	0	169	63	62	0	1	82	187	0	37	47	4	707	3,407
	8:45 AM	0	5	50	2	0	147	71	73	0	4	62	173	0	51	69	4	711	3,183
Count Total		0	40	473	14	1	1,486	669	520	0	33	508	1,405	0	299	491	44	5,983	0
Peak Hour	All	0	29	284	9	1	845	441	294	0	23	280	790	0	158	282	29	3,465	0
	HV	0	1	23	2	0	18	16	9	0	1	6	24	0	10	6	1	117	0
	HV%	-	3%	8%	22%	0%	2%	4%	3%	-	4%	2%	3%	-	6%	2%	3%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	10	3	0	16	0	0	0	1	1	1	0	0	0	1
7:15 AM	3	8	4	2	17	0	0	0	0	0	0	0	0	0	0
7:30 AM	11	4	4	3	22	0	0	0	0	0	1	0	1	0	2
7:45 AM	4	14	10	6	34	0	0	0	0	0	1	1	2	0	4
8:00 AM	6	14	11	7	38	0	1	0	0	1	0	0	0	0	0
8:15 AM	5	11	6	1	23	0	0	0	0	0	0	0	1	0	1
8:30 AM	5	13	7	4	29	0	0	0	0	0	1	2	1	2	6
8:45 AM	5	8	8	4	25	0	0	0	0	0	0	0	2	1	3
Count Total	42	82	53	27	204	0	1	0	1	2	4	3	7	3	17
Peak Hour	26	43	31	17	117	0	1	0	0	1	2	1	4	0	7

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	0	0	4	3	3	0	0	0	3	0	0	0	0	16	0
7:15 AM	0	0	3	0	0	6	2	0	0	0	1	3	0	2	0	0	17	0
7:30 AM	0	1	10	0	0	2	2	0	0	0	2	2	0	1	2	0	22	0
7:45 AM	0	0	4	0	0	3	6	5	0	1	2	7	0	4	2	0	34	89
8:00 AM	0	0	5	1	0	7	7	0	0	0	1	10	0	5	1	1	38	111
8:15 AM	0	0	4	1	0	6	1	4	0	0	1	5	0	0	1	0	23	117
8:30 AM	0	0	5	0	0	9	2	2	0	0	1	6	0	2	1	1	29	124
8:45 AM	0	0	5	0	0	2	5	1	0	1	0	7	0	4	0	0	25	115
Count Total	0	1	39	2	0	39	28	15	0	2	8	43	0	18	7	2	204	0
Peak Hour	0	1	23	2	0	18	16	9	0	1	6	24	0	10	6	1	117	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Calle Del Adobe			W Laurel Dr			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	1				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	0	0	0	1	0	0	0	0	0	0	1	2	0				
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Davis Rd Calle Del Adobe

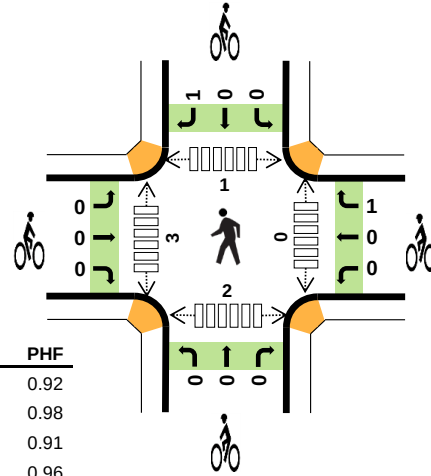
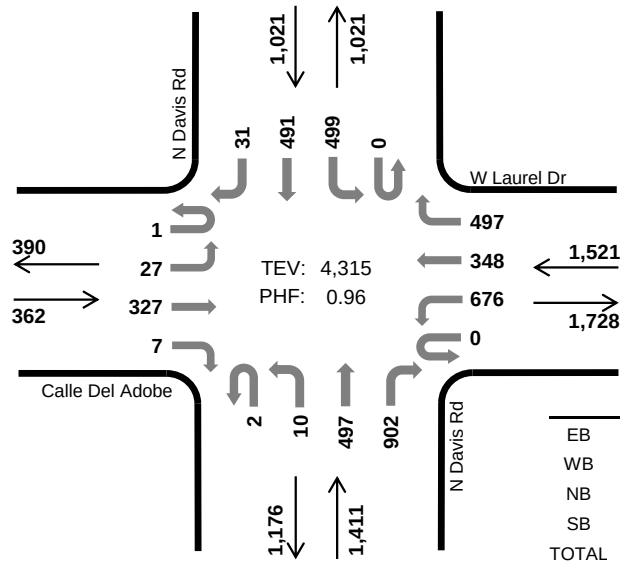


Peak Hour

Date: 05-22-2019

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	6.4%	0.92
WB	2.6%	0.98
NB	1.3%	0.91
SB	0.9%	0.96
TOTAL	2.1%	0.96

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	4	62	4	0	175	97	135	0	5	125	200	0	108	122	6	1,043	0
4:15 PM		0	18	79	2	0	186	78	116	0	3	123	214	0	136	130	18	1,103	0
4:30 PM		0	7	74	1	0	133	77	122	0	2	126	247	0	124	106	8	1,027	0
4:45 PM		0	6	52	0	0	187	89	117	0	3	94	116	0	101	118	8	891	4,064
5:00 PM		0	7	80	0	0	176	92	105	1	2	110	204	0	122	132	6	1,037	4,058
5:15 PM		0	7	79	1	0	165	83	141	0	2	130	254	0	132	119	10	1,123	4,078
5:30 PM		1	7	86	4	0	165	90	130	0	3	139	225	0	118	112	3	1,083	4,134
5:45 PM		0	6	82	2	0	170	83	121	1	3	118	219	0	127	128	12	1,072	4,315
Count Total		1	62	594	14	0	1,357	689	987	2	23	965	1,679	0	968	967	71	8,379	0
Peak Hour	All	1	27	327	7	0	676	348	497	2	10	497	902	0	499	491	31	4,315	0
	HV	0	0	21	2	0	7	28	4	0	0	0	18	0	3	6	0	89	0
	HV%	0%	0%	6%	29%	-	1%	8%	1%	0%	0%	0%	2%	-	1%	1%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	7	2	0	13	0	0	0	0	0	0	3	2	1	6
4:15 PM	1	7	10	3	21	0	0	0	0	0	1	0	1	0	2
4:30 PM	3	10	2	2	17	0	0	0	0	0	1	2	0	1	4
4:45 PM	3	13	2	2	20	0	0	0	1	1	4	1	0	0	5
5:00 PM	7	14	6	4	31	0	0	0	0	0	0	1	0	0	1
5:15 PM	7	13	3	2	25	0	1	0	0	1	0	1	0	2	3
5:30 PM	7	4	4	3	18	0	0	0	0	0	0	0	1	0	1
5:45 PM	2	8	5	0	15	0	0	0	1	1	0	1	0	0	1
Count Total	34	76	34	16	160	0	1	0	2	3	6	9	4	4	23
Peak Hour	23	39	18	9	89	0	1	0	1	2	0	3	1	2	6

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	0	0	1	6	0	0	0	0	2	0	0	0	0	13	0
4:15 PM	0	0	1	0	0	2	5	0	0	0	1	9	0	0	2	1	21	0
4:30 PM	0	0	3	0	0	1	9	0	0	0	0	2	0	1	1	0	17	0
4:45 PM	0	0	3	0	0	4	8	1	0	0	0	2	0	0	1	1	20	71
5:00 PM	0	0	7	0	0	2	12	0	0	0	0	6	0	2	2	0	31	89
5:15 PM	0	0	7	0	0	4	6	3	0	0	0	3	0	0	2	0	25	93
5:30 PM	0	0	5	2	0	1	3	0	0	0	0	4	0	1	2	0	18	94
5:45 PM	0	0	2	0	0	0	7	1	0	0	0	5	0	0	0	0	15	89
Count Total	0	0	32	2	0	15	56	5	0	0	1	33	0	4	10	2	160	0
Peak Hour	0	0	21	2	0	7	28	4	0	0	0	18	0	3	6	0	89	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Calle Del Adobe			W Laurel Dr			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	2				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	2				
Count Total	0	0	0	0	0	1	0	0	0	1	0	1	3	0				
Peak Hour	0	0	0	0	0	1	0	0	0	0	0	1	2	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd Calle Del Adobe

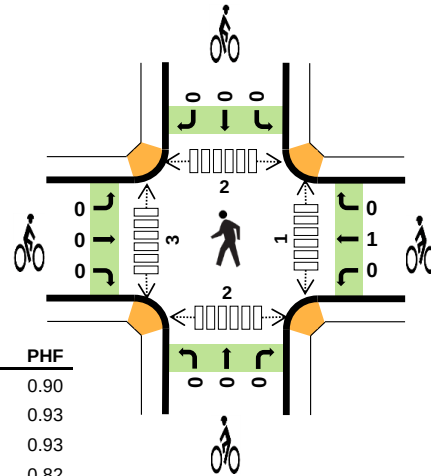
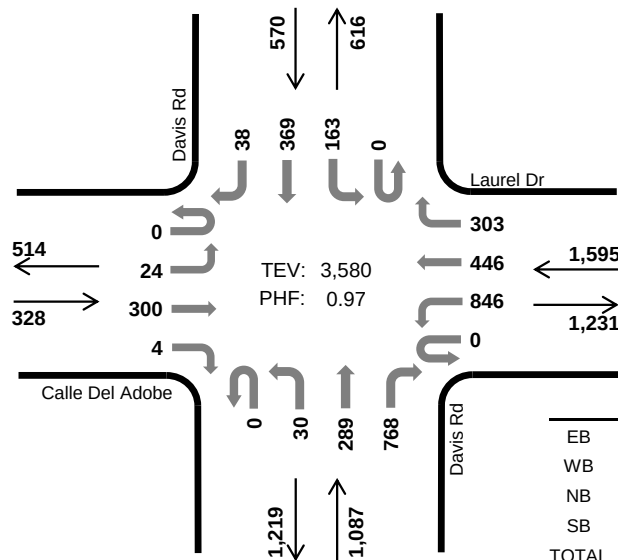


Peak Hour

Date: 09-24-2019

Count Period: 7:00 AM to 9:00 AM

Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.9%	0.90
WB	3.1%	0.93
NB	2.2%	0.93
SB	2.1%	0.82
TOTAL	2.8%	0.97

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	44	2	0	153	56	29	0	3	45	115	0	11	35	2	496	0
7:15 AM		0	5	45	3	0	181	62	48	0	1	57	155	0	22	62	3	644	0
7:30 AM		0	3	82	1	0	236	102	48	0	3	58	207	0	33	66	6	845	0
7:45 AM		0	6	71	1	0	198	119	57	0	8	77	207	0	38	120	16	918	2,903
8:00 AM		0	6	66	1	0	207	136	84	0	14	83	176	0	35	105	12	925	3,332
8:15 AM		0	9	81	1	0	205	89	114	0	5	71	178	0	57	78	4	892	3,580
8:30 AM		0	9	46	2	0	161	58	66	0	2	97	213	0	40	65	6	765	3,500
8:45 AM		0	6	33	2	0	167	64	78	0	3	94	135	0	49	65	3	699	3,281
Count Total		0	45	468	13	0	1,508	686	524	0	39	582	1,386	0	285	596	52	6,184	0
Peak Hour	All	0	24	300	4	0	846	446	303	0	30	289	768	0	163	369	38	3,580	0
	HV	0	1	15	0	0	27	17	5	0	3	4	17	0	3	8	1	101	0
	HV%	-	4%	5%	0%	-	3%	4%	2%	-	10%	1%	2%	-	2%	2%	3%	3%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	7	2	3	16	0	0	0	0	0	0	1	1	0	2
7:15 AM	8	11	3	3	25	0	0	0	0	0	0	0	0	1	1
7:30 AM	7	4	9	2	22	0	0	0	0	0	0	2	0	0	2
7:45 AM	2	11	6	3	22	0	0	0	0	0	0	0	0	2	2
8:00 AM	2	14	6	4	26	0	0	0	0	0	0	1	0	0	1
8:15 AM	5	20	3	3	31	0	1	0	0	1	1	0	2	0	3
8:30 AM	6	10	3	2	21	0	0	0	0	0	0	0	0	0	0
8:45 AM	3	6	3	5	17	0	0	0	0	0	0	0	0	0	0
Count Total	37	83	35	25	180	0	1	0	0	1	1	4	3	3	11
Peak Hour	16	49	24	12	101	0	1	0	0	1	1	3	2	2	8

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	5	1	1	0	1	1	0	0	1	2	0	16	0
7:15 AM	0	0	8	0	0	8	3	0	0	0	1	2	0	3	0	0	25	0
7:30 AM	0	0	7	0	0	2	1	1	0	1	2	6	0	1	1	0	22	0
7:45 AM	0	0	2	0	0	7	3	1	0	1	1	4	0	0	2	1	22	85
8:00 AM	0	0	2	0	0	3	10	1	0	1	1	4	0	1	3	0	26	95
8:15 AM	0	1	4	0	0	15	3	2	0	0	0	3	0	1	2	0	31	101
8:30 AM	0	0	5	1	0	7	3	0	0	1	0	2	0	0	2	0	21	100
8:45 AM	0	0	3	0	0	4	1	1	0	1	1	1	0	1	4	0	17	95
Count Total	0	1	35	1	0	51	25	7	0	6	7	22	0	8	16	1	180	0
Peak Hour	0	1	15	0	0	27	17	5	0	3	4	17	0	3	8	1	101	0

Two-Hour Count Summaries - Bikes																
Interval Start	Calle Del Adobe			Laurel Dr			Davis Rd			Davis Rd			15-min Total	Rolling One Hour		
	Eastbound			Westbound			Northbound			Southbound						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	1		
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0		
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd Calle Del Adobe

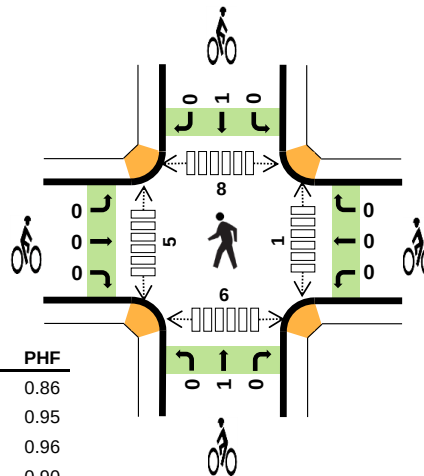
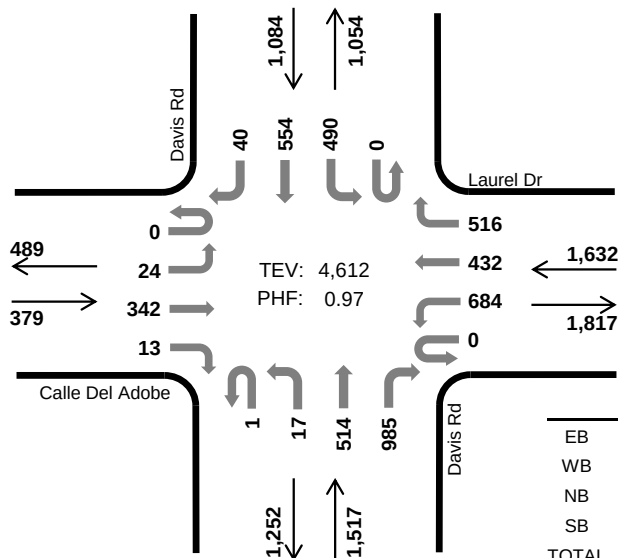


Peak Hour

Date: 09-24-2019

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	3.4%	0.86
WB	1.4%	0.95
NB	0.6%	0.96
SB	1.1%	0.90
TOTAL	1.2%	0.97

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	10	70	5	0	159	77	124	0	2	128	207	1	119	132	6	1,040	0
	4:15 PM	0	6	71	1	0	185	84	124	0	2	116	244	0	97	132	9	1,071	0
	4:30 PM	0	3	78	5	0	168	81	125	0	3	113	208	0	123	129	13	1,049	0
	4:45 PM	0	5	81	3	0	167	108	155	0	5	128	241	0	130	126	8	1,157	4,317
	5:00 PM	0	6	103	1	0	180	111	123	1	7	124	251	0	104	119	10	1,140	4,417
	5:15 PM	0	5	74	2	0	156	106	121	0	3	125	237	0	122	167	13	1,131	4,477
	5:30 PM	0	8	84	7	0	181	107	117	0	2	137	256	0	134	142	9	1,184	4,612
	5:45 PM	0	9	61	3	0	190	77	104	0	4	117	266	0	130	121	6	1,088	4,543
Count Total		0	52	622	27	0	1,386	751	993	1	28	988	1,910	1	959	1,068	74	8,860	0
Peak Hour	All	0	24	342	13	0	684	432	516	1	17	514	985	0	490	554	40	4,612	0
	HV	0	0	13	0	0	9	12	2	0	0	3	6	0	2	10	0	57	0
	HV%	-	0%	4%	0%	-	1%	3%	0%	0%	0%	1%	1%	-	0%	2%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	12	7	4	26	0	0	0	0	0	1	1	1	0	3
4:15 PM	5	14	5	3	27	0	0	0	0	0	1	5	1	1	8
4:30 PM	8	7	0	4	19	0	0	2	0	2	2	2	0	2	6
4:45 PM	4	7	2	2	15	0	0	0	0	0	1	1	1	1	4
5:00 PM	3	6	3	2	14	0	0	0	0	0	0	3	2	0	5
5:15 PM	3	4	2	7	16	0	0	1	0	1	0	0	2	4	6
5:30 PM	3	6	2	1	12	0	0	0	1	1	0	1	3	1	5
5:45 PM	4	6	13	3	26	0	0	0	0	0	3	0	0	1	4
Count Total	33	62	34	26	155	0	0	3	1	4	8	13	10	10	41
Peak Hour	13	23	9	12	57	0	0	1	1	2	1	5	8	6	20

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	11	1	0	0	3	4	0	0	4	0	26	0
4:15 PM	0	0	5	0	0	2	11	1	0	1	0	4	0	1	2	0	27	0
4:30 PM	0	0	7	1	0	2	5	0	0	0	0	0	0	2	2	0	19	0
4:45 PM	0	0	4	0	0	2	5	0	0	0	0	2	0	1	1	0	15	87
5:00 PM	0	0	3	0	0	3	3	0	0	0	1	2	0	1	1	0	14	75
5:15 PM	0	0	3	0	0	2	2	0	0	0	2	0	0	0	7	0	16	64
5:30 PM	0	0	3	0	0	2	2	2	0	0	0	2	0	0	1	0	12	57
5:45 PM	0	1	3	0	0	2	3	1	0	1	4	8	0	1	2	0	26	68
Count Total	0	1	31	1	0	15	42	5	0	2	10	22	0	6	20	0	155	0
Peak Hour	0	0	13	0	0	9	12	2	0	0	3	6	0	2	10	0	57	0

Two-Hour Count Summaries - Bikes																
Interval Start	Calle Del Adobe			Laurel Dr			Davis Rd			Davis Rd			15-min Total	Rolling One Hour		
	Eastbound			Westbound			Northbound			Southbound						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	3		
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
Count Total	0	0	0	0	0	0	0	3	0	0	1	0	4	0		
Peak Hour	0	0	0	0	0	0	0	1	0	0	1	0	2	0		

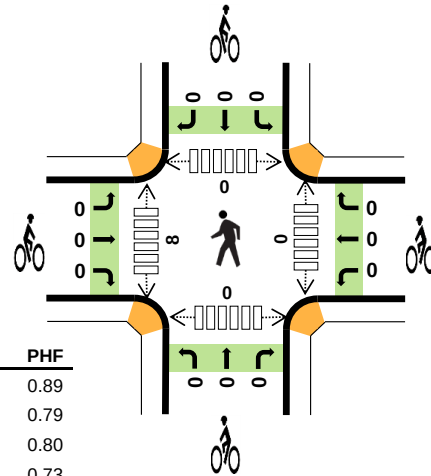
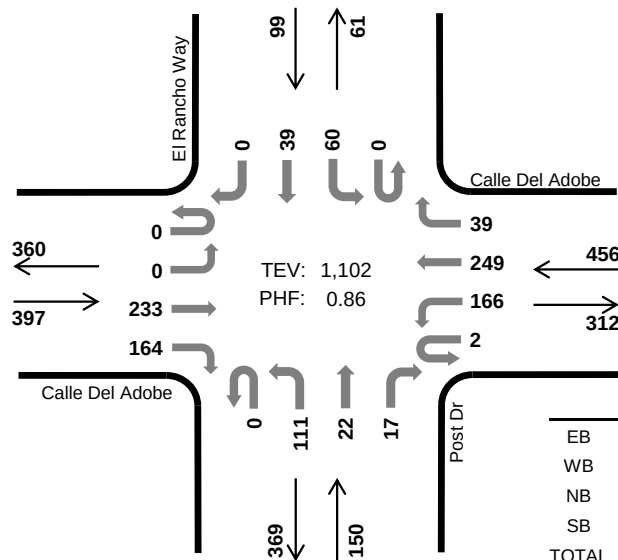
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Post Dr Calle Del Adobe



Peak Hour

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %	PHF
EB	10.6%	0.89
WB	3.9%	0.79
NB	4.0%	0.80
SB	0.0%	0.73
TOTAL	6.0%	0.86

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	19	16	0	11	36	4	0	15	1	2	0	18	10	0	132	0
7:15 AM		0	0	29	19	1	22	26	5	0	10	2	1	0	18	6	0	139	0
7:30 AM		0	0	44	36	0	29	39	11	0	22	0	2	0	25	9	0	217	0
7:45 AM		0	0	59	37	1	66	65	5	0	31	5	8	0	18	6	0	301	789
8:00 AM		0	0	69	41	1	31	99	13	0	32	10	5	0	10	9	0	320	977
8:15 AM		0	0	61	50	0	40	46	10	0	26	7	2	0	7	15	0	264	1,102
8:30 AM		0	0	35	22	0	18	33	9	0	18	11	4	0	9	7	1	167	1,052
8:45 AM		0	0	29	17	0	22	39	11	0	13	4	3	0	16	3	0	157	908
Count Total		0	0	345	238	3	239	383	68	0	167	40	27	0	121	65	1	1,697	0
Peak Hour	All	0	0	233	164	2	166	249	39	0	111	22	17	0	60	39	0	1,102	0
	HV	0	0	25	17	0	3	12	3	0	2	1	3	0	0	0	0	66	0
	HV%	-	-	11%	10%	0%	2%	5%	8%	-	2%	5%	18%	-	0%	0%	-	6%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	2	0	0	7	0	0	1	0	1	0	0	0	0	0
7:15 AM	5	3	0	0	8	0	0	0	0	0	0	0	0	0	0
7:30 AM	16	2	1	0	19	0	0	0	0	0	0	0	0	0	0
7:45 AM	6	6	3	0	15	0	0	0	0	0	0	1	0	0	1
8:00 AM	13	10	2	0	25	0	0	0	0	0	0	7	0	0	7
8:15 AM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0
8:30 AM	5	1	1	0	7	0	0	0	0	0	0	2	0	1	3
8:45 AM	6	7	2	1	16	0	0	0	0	0	0	2	0	0	2
Count Total	63	31	9	1	104	0	0	1	0	1	0	12	0	1	13
Peak Hour	42	18	6	0	66	0	0	0	0	0	0	8	0	0	8

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	0	7	0
7:15 AM	0	0	3	2	0	2	1	0	0	0	0	0	0	0	0	0	8	0
7:30 AM	0	0	10	6	0	0	0	2	0	0	0	1	0	0	0	0	19	0
7:45 AM	0	0	3	3	0	1	5	0	0	2	0	1	0	0	0	0	15	49
8:00 AM	0	0	6	7	0	2	7	1	0	0	1	1	0	0	0	0	25	67
8:15 AM	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7	66
8:30 AM	0	0	4	1	0	0	1	0	0	1	0	0	0	0	0	0	7	54
8:45 AM	0	0	4	2	0	0	7	0	0	2	0	0	0	1	0	0	16	55
Count Total	0	0	39	24	0	5	23	3	0	5	1	3	0	1	0	0	104	0
Peak Hour	0	0	25	17	0	3	12	3	0	2	1	3	0	0	0	0	66	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Calle Del Adobe			Calle Del Adobe			Post Dr			El Rancho Way			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Post Dr Calle Del Adobe

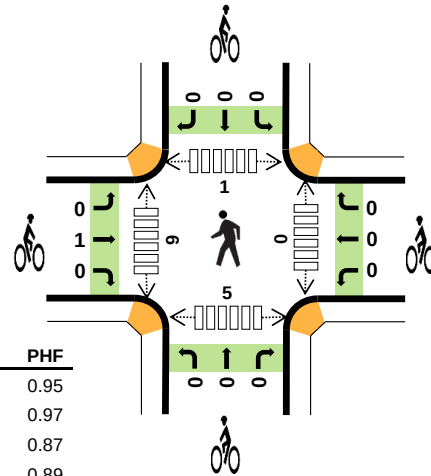
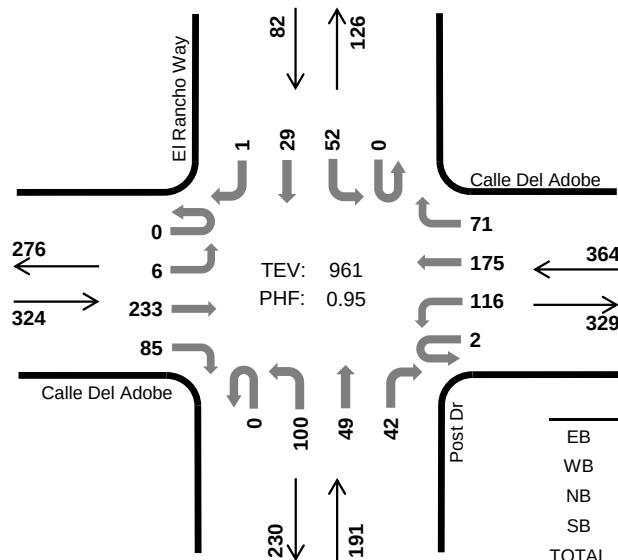


Peak Hour

Date: 05-22-2019

Count Period: 4:00 PM to 6:00 PM

Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	9.3%	0.95
WB	7.1%	0.97
NB	4.2%	0.87
SB	0.0%	0.89
TOTAL	6.7%	0.95

Two-Hour Count Summaries

Interval Start		Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	1	47	23	1	24	46	24	0	23	10	3	0	17	6	1	226	0
	4:15 PM	0	2	47	23	2	28	45	19	0	25	17	13	0	21	6	0	248	0
	4:30 PM	0	1	47	23	0	38	26	15	0	23	14	15	0	13	4	0	219	0
	4:45 PM	0	1	50	21	0	26	48	13	0	28	17	10	0	10	10	0	234	927
	5:00 PM	0	1	56	26	1	28	41	21	0	23	6	11	0	14	6	0	234	935
	5:15 PM	0	0	65	19	1	29	43	19	0	23	11	11	0	14	5	0	240	927
	5:30 PM	0	4	62	19	0	33	43	18	0	26	15	10	0	14	8	1	253	961
	5:45 PM	0	1	46	17	2	21	30	20	0	18	13	7	0	21	9	0	205	932
Count Total		0	11	420	171	7	227	322	149	0	189	103	80	0	124	54	2	1,859	0
Peak Hour	All	0	6	233	85	2	116	175	71	0	100	49	42	0	52	29	1	961	0
	HV	0	0	23	7	0	3	23	0	0	8	0	0	0	0	0	0	64	0
	HV%	-	0%	10%	8%	0%	3%	13%	0%	-	8%	0%	0%	-	0%	0%	0%	7%	0

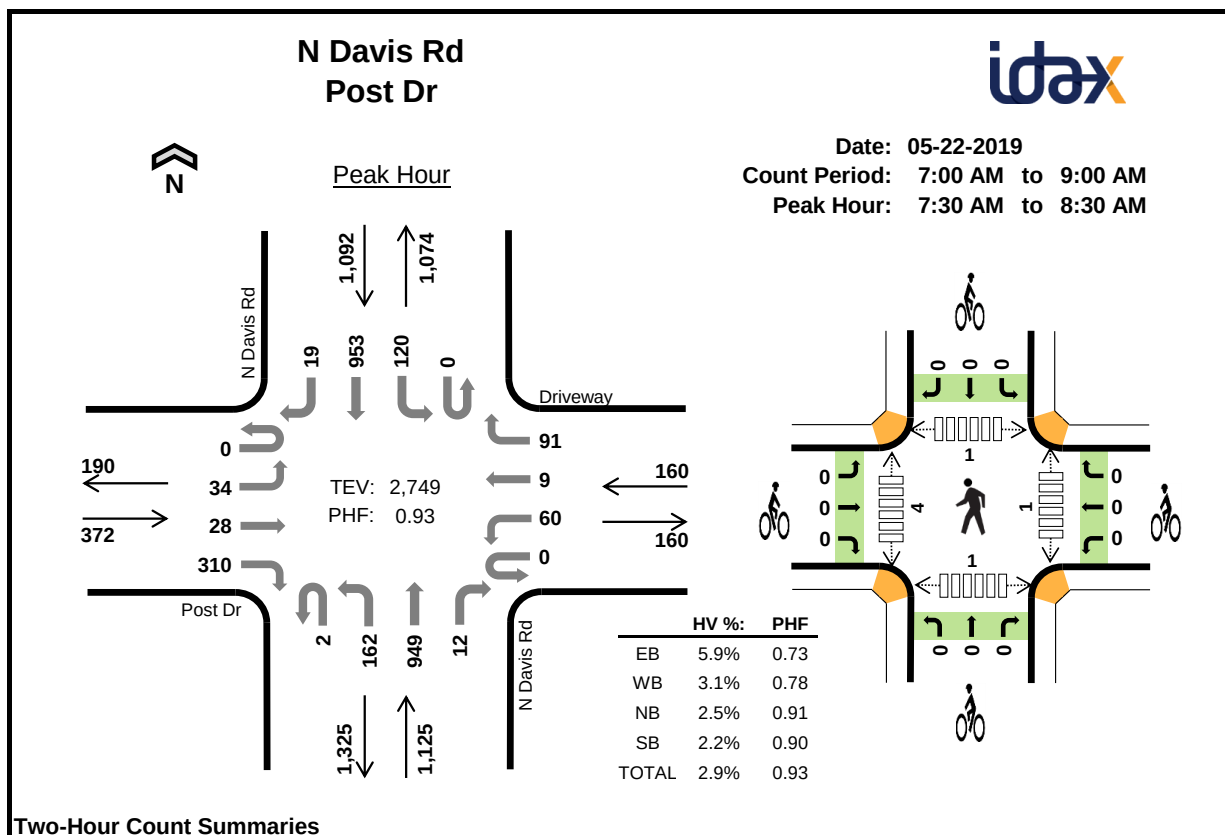
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	6	2	0	13	0	0	0	0	0	0	0	0	1	1
4:15 PM	5	8	1	0	14	0	0	0	0	0	0	1	1	0	2
4:30 PM	3	6	2	0	11	1	0	0	0	1	0	0	0	1	1
4:45 PM	4	6	2	0	12	0	0	0	0	0	0	1	0	0	1
5:00 PM	11	11	3	0	25	0	0	0	0	0	0	0	0	2	2
5:15 PM	12	7	0	0	19	1	0	0	0	1	0	7	0	1	8
5:30 PM	3	2	3	0	8	0	0	0	0	0	0	1	1	2	4
5:45 PM	2	3	0	0	5	0	1	0	0	1	0	0	0	0	0
Count Total	45	49	13	0	107	2	1	0	0	3	0	10	2	7	19
Peak Hour	30	26	8	0	64	1	0	0	0	1	0	9	1	5	15

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
4:00 PM	0	0	4	1	0	0	6	0	0	2	0	0	0	0	0	0	0	13	0
4:15 PM	0	0	3	2	0	0	8	0	0	1	0	0	0	0	0	0	0	14	0
4:30 PM	0	0	2	1	0	0	6	0	0	2	0	0	0	0	0	0	0	11	0
4:45 PM	0	0	3	1	0	0	6	0	0	2	0	0	0	0	0	0	0	12	50
5:00 PM	0	0	9	2	0	1	10	0	0	3	0	0	0	0	0	0	0	25	62
5:15 PM	0	0	8	4	0	2	5	0	0	0	0	0	0	0	0	0	0	19	67
5:30 PM	0	0	3	0	0	0	2	0	0	3	0	0	0	0	0	0	0	8	64
5:45 PM	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	5	57
Count Total	0	0	33	12	0	3	46	0	0	13	0	0	0	0	0	0	0	107	0
Peak Hour	0	0	23	7	0	3	23	0	0	8	0	0	0	0	0	0	0	64	0

Two-Hour Count Summaries - Bikes																	
Interval Start	Calle Del Adobe			Calle Del Adobe			Post Dr			El Rancho Way			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	
Count Total	1	1	0	0	0	1	0	0	0	0	0	0	0	0	3	0	
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour Count Summaries

Interval Start		Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	2	3	20	0	12	1	26	0	25	121	1	0	21	168	3	403	0
	7:15 AM	0	7	3	44	0	10	1	18	0	18	166	5	0	25	184	2	483	0
	7:30 AM	0	6	8	54	0	7	0	34	0	29	227	1	0	21	227	5	619	0
	7:45 AM	0	5	7	79	0	13	3	18	0	52	255	2	0	32	271	1	738	2,243
	8:00 AM	0	11	6	69	0	16	3	15	1	44	220	1	0	34	228	5	653	2,493
	8:15 AM	0	12	7	108	0	24	3	24	1	37	247	8	0	33	227	8	739	2,749
	8:30 AM	0	10	7	43	0	15	5	28	0	47	244	4	0	35	164	9	611	2,741
	8:45 AM	0	22	0	38	0	11	2	23	0	40	200	10	1	24	147	21	539	2,542
Count Total		0	75	41	455	0	108	18	186	2	292	1,680	32	1	225	1,616	54	4,785	0
Peak Hour	All	0	34	28	310	0	60	9	91	2	162	949	12	0	120	953	19	2,749	0
	HV	0	2	2	18	0	0	0	5	0	4	24	0	0	3	20	1	79	0
	HV%	-	6%	7%	6%	-	0%	0%	5%	0%	2%	3%	0%	-	3%	2%	5%	3%	0

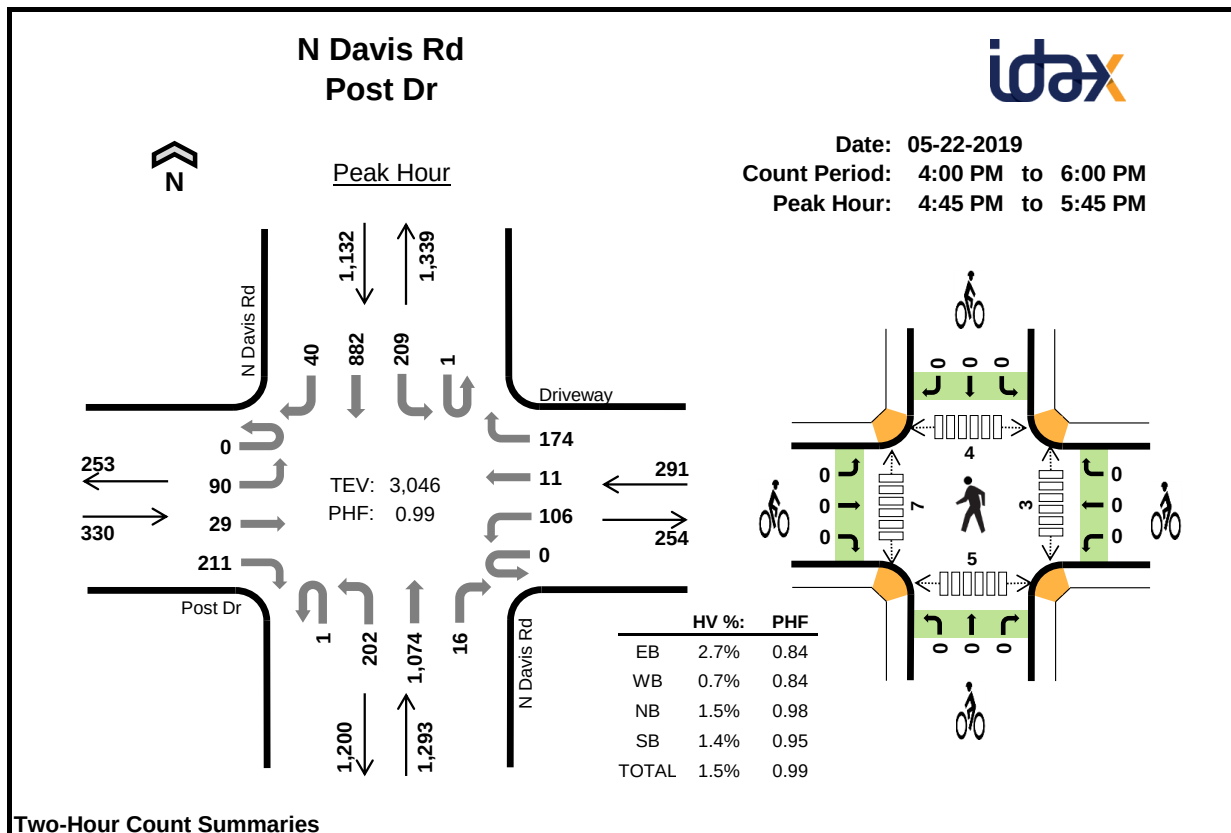
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	1	2	4	0	0	0	0	0	0	0	1	0	1
7:15 AM	3	0	5	5	13	0	0	0	0	0	0	1	0	0	1
7:30 AM	6	2	3	3	14	0	0	0	0	0	0	3	0	0	3
7:45 AM	5	1	12	5	23	0	0	0	0	0	1	0	1	0	2
8:00 AM	9	2	6	10	27	0	0	0	0	0	0	1	0	0	1
8:15 AM	2	0	7	6	15	0	0	0	0	0	0	0	0	1	1
8:30 AM	1	0	9	10	20	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	1	10	2	14	0	0	0	0	0	0	0	0	0	0
Count Total	28	6	53	43	130	0	0	0	0	0	1	5	2	1	9
Peak Hour	22	5	28	24	79	0	0	0	0	0	1	4	1	1	7

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	4	0
7:15 AM	0	0	1	2	0	0	0	0	0	0	5	0	0	0	5	0	13	0
7:30 AM	0	0	1	5	0	0	0	2	0	1	2	0	0	1	2	0	14	0
7:45 AM	0	0	1	4	0	0	0	1	0	3	9	0	0	1	4	0	23	54
8:00 AM	0	2	0	7	0	0	0	2	0	0	6	0	0	1	8	1	27	77
8:15 AM	0	0	0	2	0	0	0	0	0	0	7	0	0	0	6	0	15	79
8:30 AM	0	0	0	1	0	0	0	0	0	2	7	0	0	1	9	0	20	85
8:45 AM	0	0	0	1	0	0	1	0	0	1	7	2	0	0	2	0	14	76
Count Total	0	2	3	23	0	0	1	5	0	7	44	2	0	4	38	1	130	0
Peak Hour	0	2	2	18	0	0	0	5	0	4	24	0	0	3	20	1	79	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Post Dr			Driveway			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	16	8	44	0	27	3	49	0	41	281	9	0	58	217	18	771	0
	4:15 PM	0	22	10	42	0	27	7	47	1	56	261	7	0	47	199	14	740	0
	4:30 PM	0	36	8	38	0	10	2	43	1	52	298	7	1	52	162	14	724	0
	4:45 PM	0	20	4	53	0	26	3	37	0	62	246	9	0	51	229	18	758	2,993
	5:00 PM	0	37	10	51	0	32	3	17	0	40	288	1	0	51	224	7	761	2,983
	5:15 PM	0	18	10	48	0	29	1	57	0	47	277	3	1	54	214	7	766	3,009
	5:30 PM	0	15	5	59	0	19	4	63	1	53	263	3	0	53	215	8	761	3,046
	5:45 PM	0	21	8	45	0	13	2	51	2	39	239	9	0	66	222	2	719	3,007
Count Total		0	185	63	380	0	183	25	364	5	390	2,153	48	2	432	1,682	88	6,000	0
Peak Hour	All	0	90	29	211	0	106	11	174	1	202	1,074	16	1	209	882	40	3,046	0
	HV	0	0	1	8	0	0	0	2	0	8	11	0	0	1	15	0	46	0
	HV%	-	0%	3%	4%	-	0%	0%	1%	0%	4%	1%	0%	0%	0%	2%	0%	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	4	4	10	0	0	0	0	0	3	1	0	0	4
4:15 PM	1	1	13	3	18	0	0	0	0	0	0	1	0	0	1
4:30 PM	4	0	4	1	9	0	0	0	0	0	1	2	0	1	4
4:45 PM	1	0	2	4	7	0	0	0	0	0	2	4	1	4	11
5:00 PM	3	1	8	4	16	0	0	0	0	0	0	1	0	0	1
5:15 PM	5	0	2	3	10	0	0	0	0	0	1	0	2	0	3
5:30 PM	0	1	7	5	13	0	0	0	0	0	0	2	1	1	4
5:45 PM	0	0	5	0	5	0	0	0	0	0	0	2	0	1	3
Count Total	15	4	45	24	88	0	0	0	0	0	7	13	4	7	31
Peak Hour	9	2	19	16	46	0	0	0	0	0	3	7	4	5	19

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	1	0	0	1	3	0	0	0	4	0	10	0
4:15 PM	0	0	0	1	0	0	0	1	0	4	8	1	0	0	3	0	18	0
4:30 PM	0	2	1	1	0	0	0	0	0	3	1	0	0	0	1	0	9	0
4:45 PM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	4	0	7	44
5:00 PM	0	0	0	3	0	0	0	1	0	3	5	0	0	1	3	0	16	50
5:15 PM	0	0	1	4	0	0	0	0	0	0	2	0	0	0	3	0	10	42
5:30 PM	0	0	0	0	0	0	0	1	0	3	4	0	0	0	5	0	13	46
5:45 PM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5	44
Count Total	0	2	3	10	0	0	1	3	0	17	27	1	0	1	23	0	88	0
Peak Hour	0	0	1	8	0	0	0	2	0	8	11	0	0	1	15	0	46	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Post Dr			Driveway			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

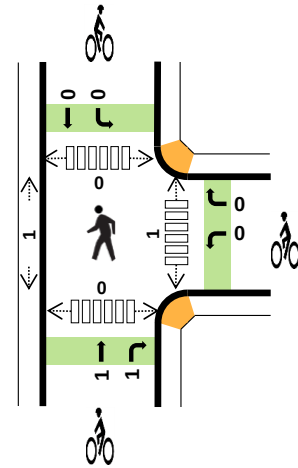
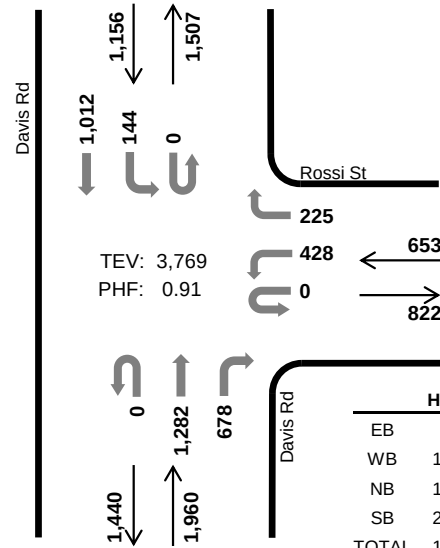
Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	4	0	1	0	0	5	2	0	0	5	0	17	0
7:15 AM	0	0	0	0	0	1	0	1	0	0	11	1	0	2	10	0	26	0
7:30 AM	0	0	0	0	0	0	0	3	0	0	2	2	0	0	9	0	16	0
7:45 AM	0	0	0	0	0	4	0	0	0	0	5	1	0	0	8	0	18	77
8:00 AM	0	0	0	0	0	6	0	0	0	0	6	1	0	1	4	0	18	78
8:15 AM	0	0	0	0	0	4	0	2	0	0	6	4	0	3	16	0	35	87
8:30 AM	0	0	0	0	0	2	0	0	0	0	5	0	0	3	13	0	23	94
8:45 AM	0	0	0	0	0	3	0	0	0	0	6	3	0	1	9	0	22	98
Count Total	0	0	0	0	0	24	0	7	0	0	46	14	0	10	74	0	175	0
Peak Hour	0	0	0	0	0	14	0	5	0	0	19	8	0	4	37	0	87	0
Two-Hour Count Summaries - Bikes																		
Interval Start	0				Rossi St				Davis Rd				Davis Rd			15-min Total	Rolling One Hour	
	Eastbound				Westbound				Northbound				Southbound					
	LT	TH	RT		LT	TH	RT		LT	TH	RT		LT	TH	RT			
7:00 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:15 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
7:45 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	0
8:00 AM	0	0	0		0	0	0		0	1	0		0	1	0		2	2
8:15 AM	0	0	0		0	0	0		0	0	0		0	1	0		1	3
8:30 AM	0	0	0		0	0	0		0	0	0		0	0	0		0	3
8:45 AM	0	0	0		0	0	0		0	0	0		1	0	0		1	4
Count Total	0	0	0		0	0	0		0	1	0		1	2	0		4	0
Peak Hour	0	0	0		0	0	0		0	1	0		0	2	0		3	0
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																		

Davis Rd Rossi St



Peak Hour

Date: 09-24-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	-	-
WB	1.2%	0.83
NB	1.2%	0.93
SB	2.4%	0.85
TOTAL	1.6%	0.91

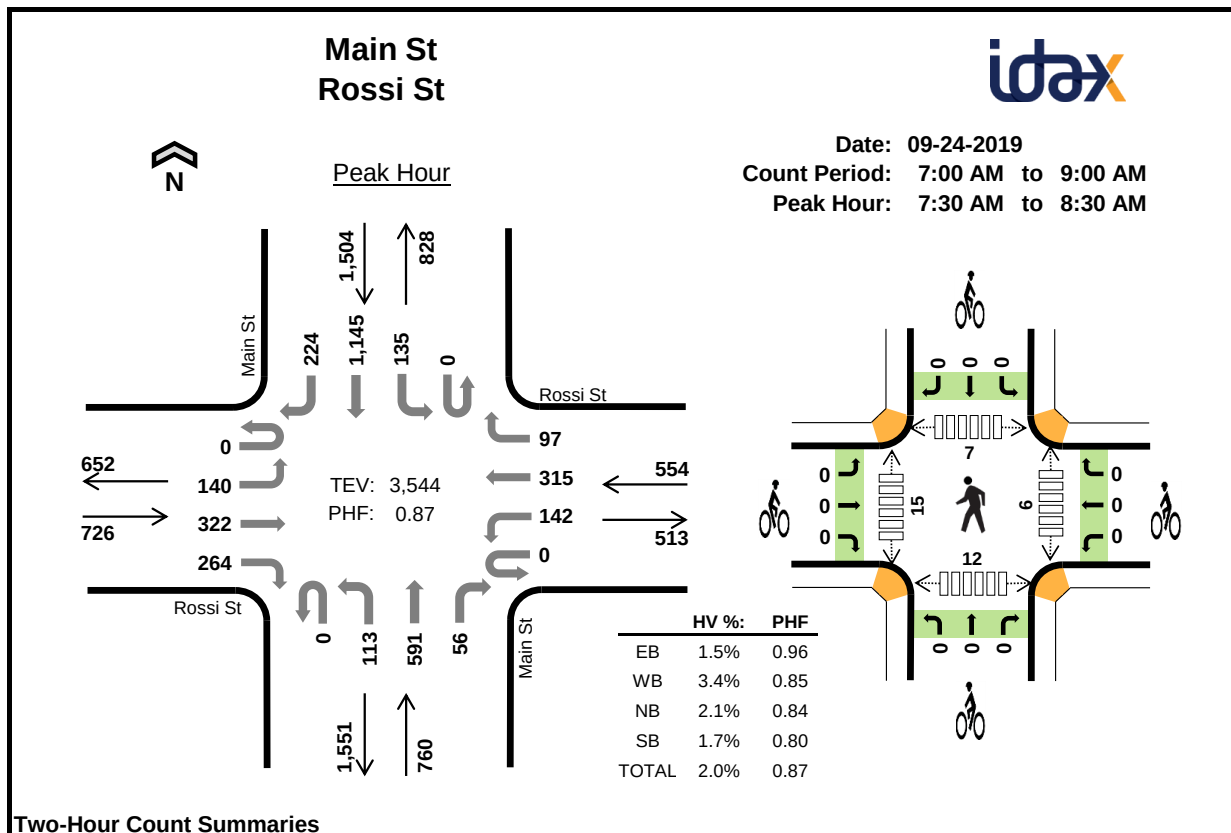
Two-Hour Count Summaries

Interval Start		0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	73	0	54	0	0	274	123	1	44	244	0	813	0
4:15 PM		0	0	0	0	0	83	0	49	0	0	287	126	6	29	234	0	814	0
4:30 PM		0	0	0	0	0	81	0	66	0	0	280	148	0	37	250	0	862	0
4:45 PM		0	0	0	0	0	81	0	60	0	0	343	152	0	37	241	0	914	3,403
5:00 PM		0	0	0	0	0	138	0	59	0	0	331	178	0	29	221	0	956	3,546
5:15 PM		0	0	0	0	0	128	0	40	0	0	328	200	0	41	300	0	1,037	3,769
5:30 PM		0	0	0	0	0	93	0	47	0	0	282	156	0	41	243	0	862	3,769
5:45 PM		0	0	0	0	0	85	0	30	0	0	251	150	1	32	253	0	802	3,657
Count Total		0	0	0	0	0	762	0	405	0	0	2,376	1,233	8	290	1,986	0	7,060	0
Peak Hour	All	0	0	0	0	0	428	0	225	0	0	1,282	678	0	144	1,012	0	3,769	0
	HV	0	0	0	0	0	6	0	2	0	0	14	10	0	10	18	0	60	0
	HV%	-	-	-	-	-	1%	-	1%	-	-	1%	1%	-	7%	2%	-	2%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	4	13	8	25	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	9	5	15	0	0	1	0	1	0	1	0	0	1
4:30 PM	0	1	4	5	10	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	5	4	10	0	0	2	0	2	0	0	0	0	0
5:00 PM	0	4	7	6	17	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	2	8	13	23	0	0	0	0	0	1	0	0	0	1
5:30 PM	0	3	10	4	17	0	0	0	0	0	2	1	0	0	3
5:45 PM	0	2	8	5	15	0	0	1	0	1	0	0	0	0	0
Count Total	0	18	64	50	132	0	0	4	0	4	3	3	0	0	6
Peak Hr	0	8	24	28	60	0	0	2	0	2	1	1	0	0	2

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	1	0	0	12	1	1	2	5	0	25	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	9	0	0	1	4	0	15	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	3	1	0	3	2	0	10	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	3	0	2	2	0	10	60
5:00 PM	0	0	0	0	0	4	0	0	0	0	5	2	0	3	3	0	17	52
5:15 PM	0	0	0	0	0	1	0	1	0	0	4	4	0	2	11	0	23	60
5:30 PM	0	0	0	0	0	3	0	0	0	0	8	2	0	1	3	0	17	67
5:45 PM	0	0	0	0	0	1	0	1	0	0	6	2	0	1	4	0	15	72
Count Total	0	0	0	0	0	14	0	4	0	0	49	15	1	15	34	0	132	0
Peak Hour	0	0	0	0	0	6	0	2	0	0	14	10	0	10	18	0	60	0
Two-Hour Count Summaries - Bikes																		
Interval Start	0			Rossi St			Davis Rd			Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	3	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1
Count Total	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4	0	0
Peak Hour	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																		

**Two-Hour Count Summaries**

Interval Start		Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	20	35	28	0	31	70	21	0	10	104	13	0	22	136	44	534	0
	7:15 AM	0	31	59	45	0	42	75	19	0	20	95	13	0	18	175	50	642	0
	7:30 AM	0	33	89	67	0	36	85	21	0	21	108	8	0	30	282	42	822	0
	7:45 AM	0	38	68	84	0	36	73	24	0	33	174	19	0	39	390	43	1,021	3,019
	8:00 AM	0	34	86	67	0	41	91	30	0	32	156	14	0	34	256	70	911	3,396
	8:15 AM	0	35	79	46	0	29	66	22	0	27	153	15	0	32	217	69	790	3,544
	8:30 AM	0	26	65	57	0	30	53	42	0	22	134	15	0	24	202	38	708	3,430
	8:45 AM	0	29	63	30	0	39	52	49	0	30	152	10	0	25	212	33	724	3,133
Count Total		0	246	544	424	0	284	565	228	0	195	1,076	107	0	224	1,870	389	6,152	0
Peak Hour	All	0	140	322	264	0	142	315	97	0	113	591	56	0	135	1,145	224	3,544	0
	HV	0	0	6	5	0	3	12	4	0	4	9	3	0	4	16	5	71	0
	HV%	-	0%	2%	2%	-	2%	4%	4%	-	4%	2%	5%	-	3%	1%	2%	2%	0

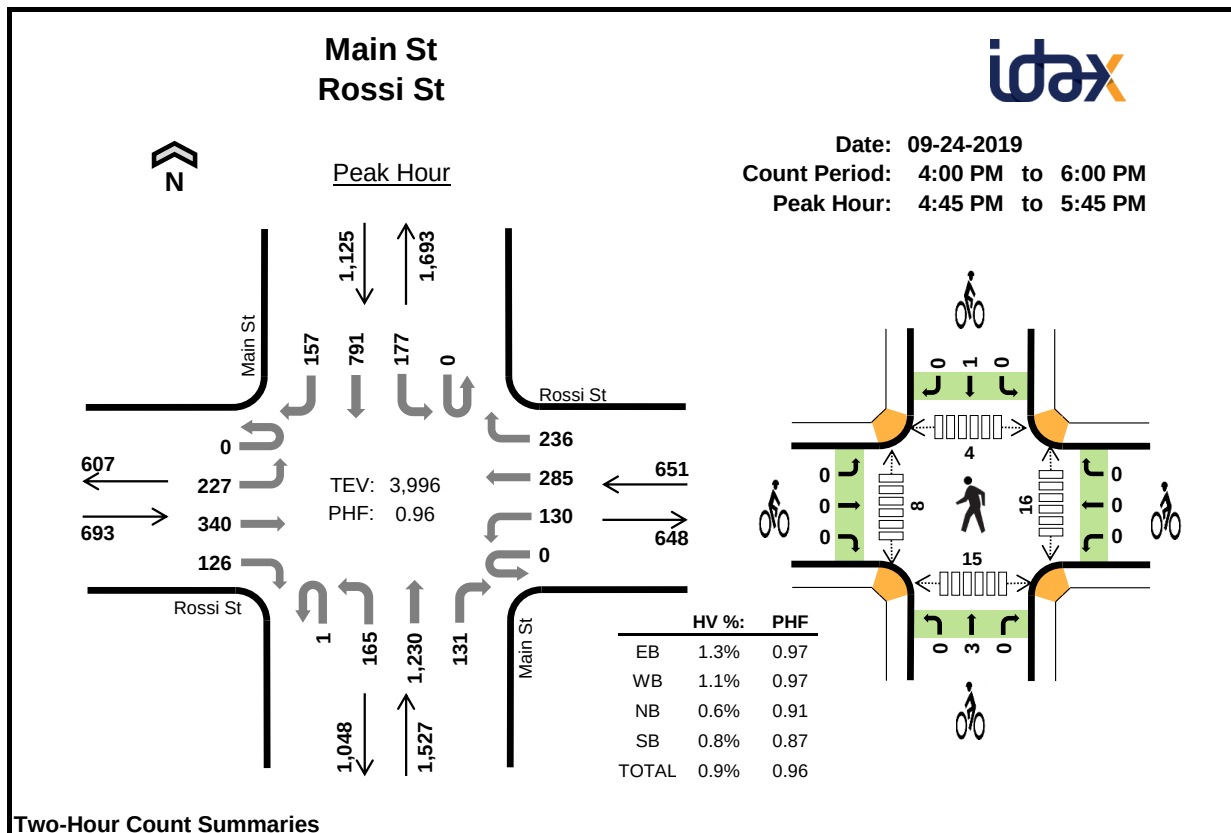
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	4	2	8	0	0	1	0	1	2	2	1	2	7
7:15 AM	4	8	6	4	22	0	0	0	0	0	0	0	0	5	5
7:30 AM	4	7	3	4	18	0	0	0	0	0	0	5	1	4	10
7:45 AM	2	4	4	4	14	0	0	0	0	0	3	3	4	7	17
8:00 AM	1	4	3	7	15	0	0	0	0	0	3	5	2	1	11
8:15 AM	4	4	6	10	24	0	0	0	0	0	0	2	0	0	2
8:30 AM	9	2	6	7	24	0	0	0	0	0	3	1	2	1	7
8:45 AM	3	3	1	4	11	0	0	0	1	1	3	4	1	1	9
Count Total	28	33	33	42	136	0	0	1	1	2	14	22	11	21	68
Peak Hour	11	19	16	25	71	0	0	0	0	0	6	15	7	12	40

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	1	0	0	3	1	0	1	1	0	8	0
7:15 AM	0	0	3	1	0	2	3	3	0	2	3	1	0	2	2	0	22	0
7:30 AM	0	0	3	1	0	0	5	2	0	1	1	1	0	1	3	0	18	0
7:45 AM	0	0	2	0	0	1	2	1	0	2	2	0	0	1	2	1	14	62
8:00 AM	0	0	0	1	0	1	2	1	0	0	3	0	0	2	3	2	15	69
8:15 AM	0	0	1	3	0	1	3	0	0	1	3	2	0	0	8	2	24	71
8:30 AM	0	3	3	3	0	1	1	0	0	0	4	2	0	1	5	1	24	77
8:45 AM	0	0	2	1	0	3	0	0	0	0	1	0	0	1	3	0	11	74
Count Total	0	3	15	10	0	9	16	8	0	6	20	7	0	9	27	6	136	0
Peak Hour	0	0	6	5	0	3	12	4	0	4	9	3	0	4	16	5	71	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Rossi St			Rossi St			Main St			Main St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1				
Count Total	0	0	0	0	0	0	0	0	1	1	0	0	2	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	50	85	37	0	33	68	56	0	49	279	20	0	44	199	37	957	0
	4:15 PM	0	52	80	33	0	35	73	77	0	44	263	18	0	49	200	42	966	0
	4:30 PM	0	54	91	36	0	38	58	65	0	43	302	13	0	44	205	37	986	0
	4:45 PM	0	65	81	28	0	35	73	55	0	42	287	33	0	48	178	32	957	3,866
	5:00 PM	0	50	90	33	0	36	66	66	0	45	335	39	0	38	187	54	1,039	3,948
	5:15 PM	0	52	83	32	0	31	68	61	1	37	296	29	0	51	227	44	1,012	3,994
	5:30 PM	0	60	86	33	0	28	78	54	0	41	312	30	0	40	199	27	988	3,996
	5:45 PM	0	63	87	28	0	34	56	56	0	34	264	22	0	50	214	33	941	3,980
Count Total		0	446	683	260	0	270	540	490	1	335	2,338	204	0	364	1,609	306	7,846	0
Peak Hour	All	0	227	340	126	0	130	285	236	1	165	1,230	131	0	177	791	157	3,996	0
	HV	0	1	1	7	0	1	4	2	0	1	7	1	0	1	7	1	34	0
	HV%	-	0%	0%	6%	-	1%	1%	1%	0%	1%	1%	1%	-	1%	1%	1%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

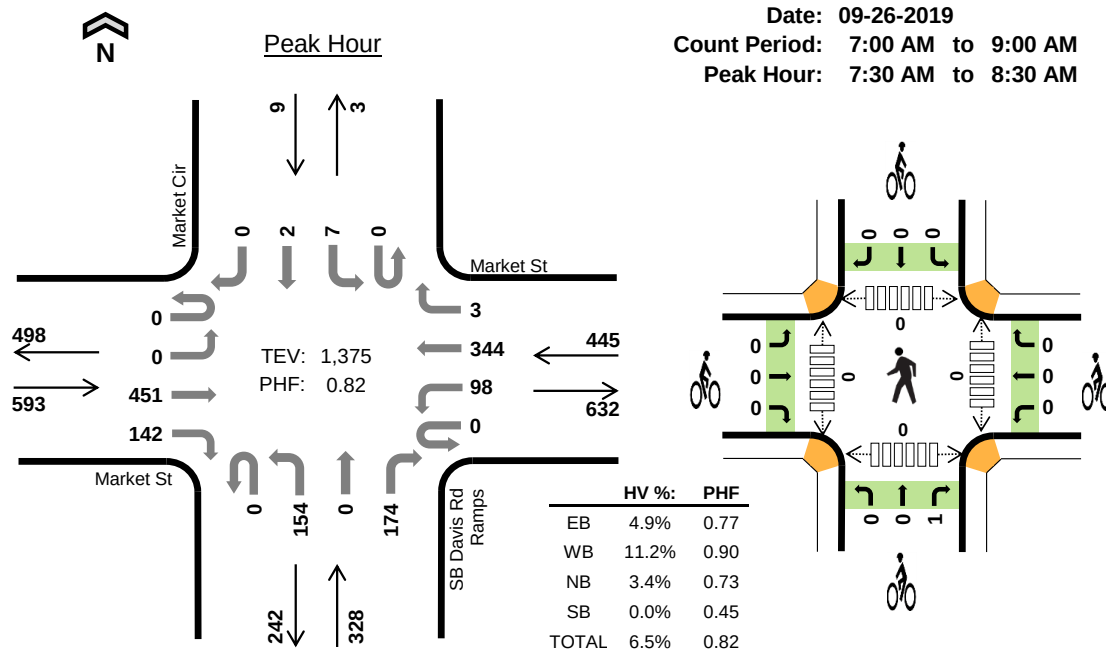
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	3	3	3	9	1	0	2	0	3	1	5	3	3	12
4:15 PM	4	4	8	1	17	0	0	1	0	1	3	3	0	8	14
4:30 PM	1	4	4	3	12	0	0	0	0	0	4	3	1	3	11
4:45 PM	4	3	0	2	9	0	0	0	0	0	4	3	2	6	15
5:00 PM	2	1	4	3	10	0	0	0	0	0	2	0	1	0	3
5:15 PM	1	2	4	2	9	0	0	2	1	3	7	3	1	2	13
5:30 PM	2	1	1	2	6	0	0	1	0	1	3	2	0	7	12
5:45 PM	2	1	4	1	8	0	0	0	0	0	5	3	4	7	19
Count Total	16	19	28	17	80	1	0	6	1	8	29	22	12	36	99
Peak Hour	9	7	9	9	34	0	0	3	1	4	16	8	4	15	43

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	1	1	1	0	0	2	1	9	0
4:15 PM	0	1	3	0	0	2	2	0	0	3	4	1	0	0	1	0	17	0
4:30 PM	0	0	0	1	0	2	2	0	0	1	2	1	0	0	1	2	12	0
4:45 PM	0	1	1	2	0	1	2	0	0	0	0	0	0	1	1	0	9	47
5:00 PM	0	0	0	2	0	0	0	1	0	1	3	0	0	0	3	0	10	48
5:15 PM	0	0	0	1	0	0	1	1	0	0	4	0	0	0	2	0	9	40
5:30 PM	0	0	0	2	0	0	1	0	0	0	0	1	0	0	1	1	6	34
5:45 PM	0	0	2	0	0	0	1	0	0	2	2	0	0	0	1	0	8	33
Count Total	0	2	6	8	0	8	9	2	0	8	16	4	0	1	12	4	80	0
Peak Hour	0	1	1	7	0	1	4	2	0	1	7	1	0	1	7	1	34	0

Two-Hour Count Summaries - Bikes																
Interval Start	Rossi St			Rossi St			Main St			Main St			15-min Total	Rolling One Hour		
	Eastbound			Westbound			Northbound			Southbound						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
4:00 PM	0	0	1	0	0	0	0	2	0	0	0	0	3	0		
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
5:15 PM	0	0	0	0	0	0	0	2	0	0	1	0	3	3		
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	4		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4		
Count Total	0	0	1	0	0	0	0	6	0	0	1	0	8	0		
Peak Hour	0	0	0	0	0	0	0	3	0	0	1	0	4	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SB Davis Rd Ramps Market St



Two-Hour Count Summaries

Interval Start		Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	1	48	18	0	29	89	0	0	60	0	23	0	1	1	0	270	0
	7:15 AM	0	0	68	26	0	22	83	0	0	47	0	24	0	0	0	0	270	0
	7:30 AM	0	0	110	32	0	28	95	0	0	47	0	41	0	1	0	0	354	0
	7:45 AM	0	0	152	41	0	21	85	2	0	49	0	63	0	4	1	0	418	1,312
	8:00 AM	0	0	81	39	0	27	86	0	0	29	0	40	0	0	0	0	302	1,344
	8:15 AM	0	0	108	30	0	22	78	1	0	29	0	30	0	2	1	0	301	1,375
	8:30 AM	0	0	88	32	0	30	72	1	0	18	0	44	0	0	0	0	285	1,306
	8:45 AM	0	0	91	37	0	27	68	1	0	20	0	24	0	1	0	1	270	1,158
Count Total		0	1	746	255	0	206	656	5	0	299	0	289	0	9	3	1	2,470	0
Peak Hour	All	0	0	451	142	0	98	344	3	0	154	0	174	0	7	2	0	1,375	0
	HV	0	0	21	8	0	13	37	0	0	4	0	7	0	0	0	0	90	0
	HV%	-	-	5%	6%	-	13%	11%	0%	-	3%	-	4%	-	0%	0%	-	7%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

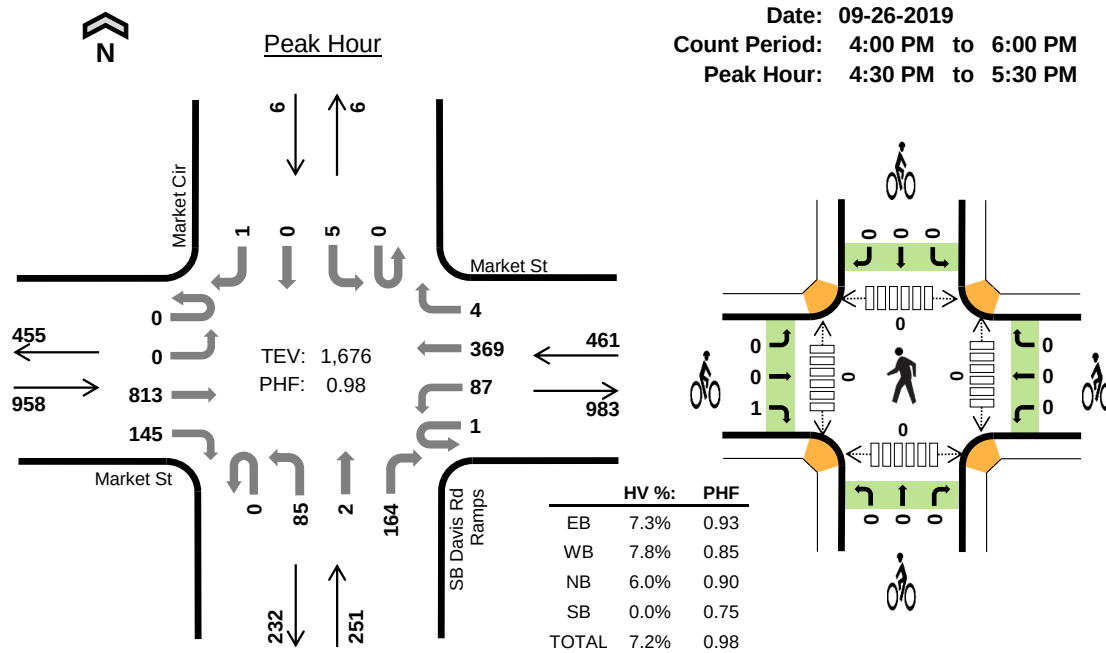
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	7	3	0	11	0	0	0	0	0	0	0	0	0	0
7:15 AM	9	9	3	0	21	0	0	0	0	0	0	0	0	0	0
7:30 AM	11	10	3	0	24	0	0	0	0	0	0	0	0	0	0
7:45 AM	5	13	2	0	20	0	0	0	0	0	0	0	0	0	0
8:00 AM	5	11	3	0	19	0	0	0	0	0	0	0	0	0	0
8:15 AM	8	16	3	0	27	0	0	1	0	1	0	0	0	0	0
8:30 AM	11	10	8	0	29	0	0	0	0	0	0	0	0	0	0
8:45 AM	15	12	6	0	33	0	0	0	0	0	0	0	0	0	0
Count Total	65	88	31	0	184	0	0	1	0	1	0	0	0	0	0
Peak Hour	29	50	11	0	90	0	0	1	0	1	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	7	0	0	2	0	1	0	0	0	0	11	0
7:15 AM	0	0	6	3	0	2	7	0	0	3	0	0	0	0	0	0	21	0
7:30 AM	0	0	6	5	0	2	8	0	0	2	0	1	0	0	0	0	24	0
7:45 AM	0	0	4	1	0	2	11	0	0	0	0	2	0	0	0	0	20	76
8:00 AM	0	0	4	1	0	3	8	0	0	1	0	2	0	0	0	0	19	84
8:15 AM	0	0	7	1	0	6	10	0	0	1	0	2	0	0	0	0	27	90
8:30 AM	0	0	7	4	0	1	9	0	0	0	0	8	0	0	0	0	29	95
8:45 AM	0	0	9	6	0	1	11	0	0	2	0	4	0	0	0	0	33	108
Count Total	0	0	44	21	0	17	71	0	0	11	0	20	0	0	0	0	184	0
Peak Hour	0	0	21	8	0	13	37	0	0	4	0	7	0	0	0	0	90	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Market St			Market St			SB Davis Rd Ramps			Market Cir			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	1				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	0	0	0	0	0	0	0	1	0	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	1	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SB Davis Rd Ramps Market St



Two-Hour Count Summaries

Interval Start		Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	0	169	33	0	24	78	1	0	24	0	44	0	2	0	0	375	0
	4:15 PM	0	0	171	35	0	22	78	1	0	21	0	38	0	1	0	0	367	0
	4:30 PM	0	0	181	32	0	24	109	2	0	27	0	38	0	2	0	0	415	0
	4:45 PM	0	0	207	43	0	21	96	0	0	14	1	35	0	0	0	0	417	1,574
	5:00 PM	0	0	207	31	1	24	84	1	0	21	1	44	0	1	0	1	416	1,615
	5:15 PM	0	0	218	39	0	18	80	1	0	23	0	47	0	2	0	0	428	1,676
	5:30 PM	0	0	175	30	0	26	77	3	0	14	0	34	0	3	0	0	362	1,623
	5:45 PM	0	0	145	44	0	27	73	0	0	15	0	34	0	0	0	0	338	1,544
Count Total		0	0	1,473	287	1	186	675	9	0	159	2	314	0	11	0	1	3,118	0
Peak Hour	All	0	0	813	145	1	87	369	4	0	85	2	164	0	5	0	1	1,676	0
	HV	0	0	50	20	0	4	32	0	0	3	0	12	0	0	0	0	121	0
	HV%	-	-	6%	14%	0%	5%	9%	0%	-	4%	0%	7%	-	0%	-	0%	7%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

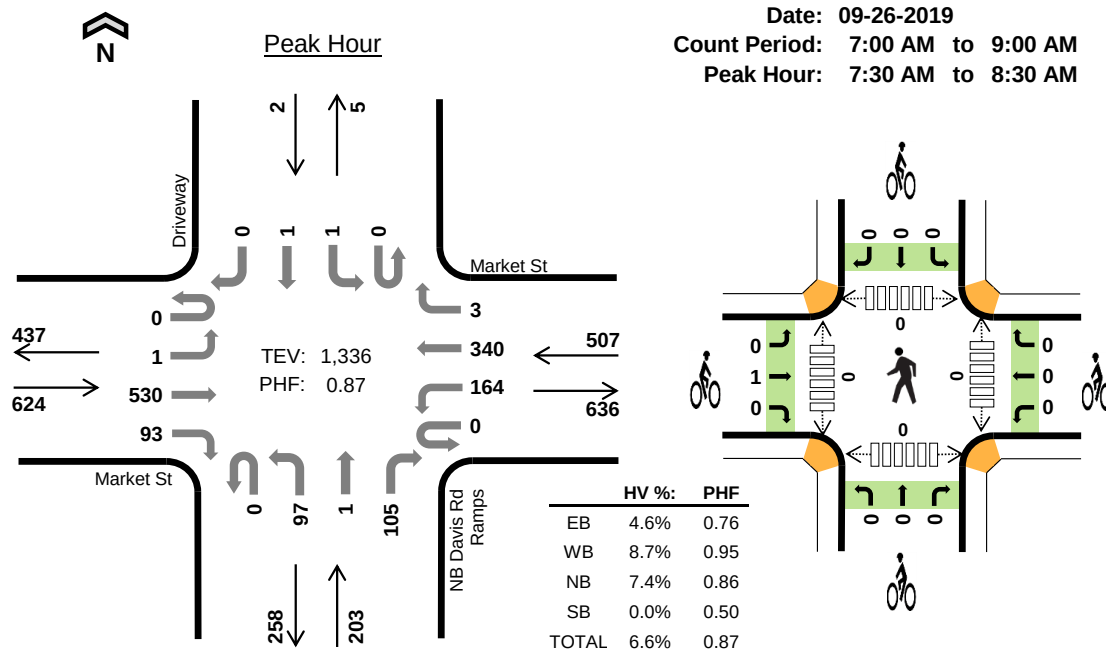
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	14	8	7	0	29	0	0	0	0	0	0	0	0	0	0
4:15 PM	7	11	11	0	29	0	1	0	0	1	0	0	1	0	1
4:30 PM	18	9	3	0	30	0	0	0	0	0	0	0	0	0	0
4:45 PM	18	15	2	0	35	0	0	0	0	0	0	0	0	0	0
5:00 PM	21	6	3	0	30	1	0	0	0	1	0	0	0	0	0
5:15 PM	13	6	7	0	26	0	0	0	0	0	0	0	0	0	0
5:30 PM	18	6	6	0	30	0	0	0	0	0	0	0	0	0	0
5:45 PM	21	13	2	0	36	0	0	0	0	0	0	0	0	0	0
Count Total	130	74	41	0	245	1	1	0	0	2	0	0	1	0	1
Peak Hour	70	36	15	0	121	1	0	0	0	1	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	12	2	0	3	5	0	0	1	0	6	0	0	0	0	29	0
4:15 PM	0	0	4	3	0	1	10	0	0	2	0	9	0	0	0	0	29	0
4:30 PM	0	0	15	3	0	1	8	0	0	1	0	2	0	0	0	0	30	0
4:45 PM	0	0	11	7	0	2	13	0	0	0	0	2	0	0	0	0	35	123
5:00 PM	0	0	17	4	0	0	6	0	0	0	0	3	0	0	0	0	30	124
5:15 PM	0	0	7	6	0	1	5	0	0	2	0	5	0	0	0	0	26	121
5:30 PM	0	0	12	6	0	0	6	0	0	0	0	6	0	0	0	0	30	121
5:45 PM	0	0	14	7	0	1	12	0	0	1	0	1	0	0	0	0	36	122
Count Total	0	0	92	38	0	9	65	0	0	7	0	34	0	0	0	0	245	0
Peak Hour	0	0	50	20	0	4	32	0	0	3	0	12	0	0	0	0	121	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Market St			Market St			SB Davis Rd Ramps			Market Cir			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	2				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	0	1	0	1	0	0	0	0	0	0	0	2	0				
Peak Hour	0	0	1	0	0	0	0	0	0	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NB Davis Rd Ramps Market St



Two-Hour Count Summaries

Interval Start		Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	0	62	7	0	19	107	1	0	10	0	26	0	1	0	0	233	0
	7:15 AM	0	1	92	14	0	22	85	0	0	25	1	23	0	0	0	0	263	0
	7:30 AM	0	0	130	23	0	34	95	1	0	22	0	22	0	0	0	0	327	0
	7:45 AM	0	0	179	27	0	41	85	1	0	25	1	26	0	0	0	0	385	1,208
	8:00 AM	0	1	105	16	0	51	82	1	0	28	0	31	0	1	0	0	316	1,291
	8:15 AM	0	0	116	27	0	38	78	0	0	22	0	26	0	0	1	0	308	1,336
	8:30 AM	0	0	112	16	0	30	87	0	0	16	0	32	0	0	0	0	293	1,302
	8:45 AM	0	0	96	20	0	46	83	0	0	17	0	20	0	0	0	0	282	1,199
Count Total		0	2	892	150	0	281	702	4	0	165	2	206	0	2	1	0	2,407	0
Peak Hour	All	0	1	530	93	0	164	340	3	0	97	1	105	0	1	1	0	1,336	0
	HV	0	0	25	4	0	5	38	1	0	10	0	5	0	0	0	0	88	0
	HV%	-	0%	5%	4%	-	3%	11%	33%	-	10%	0%	5%	-	0%	0%	-	7%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

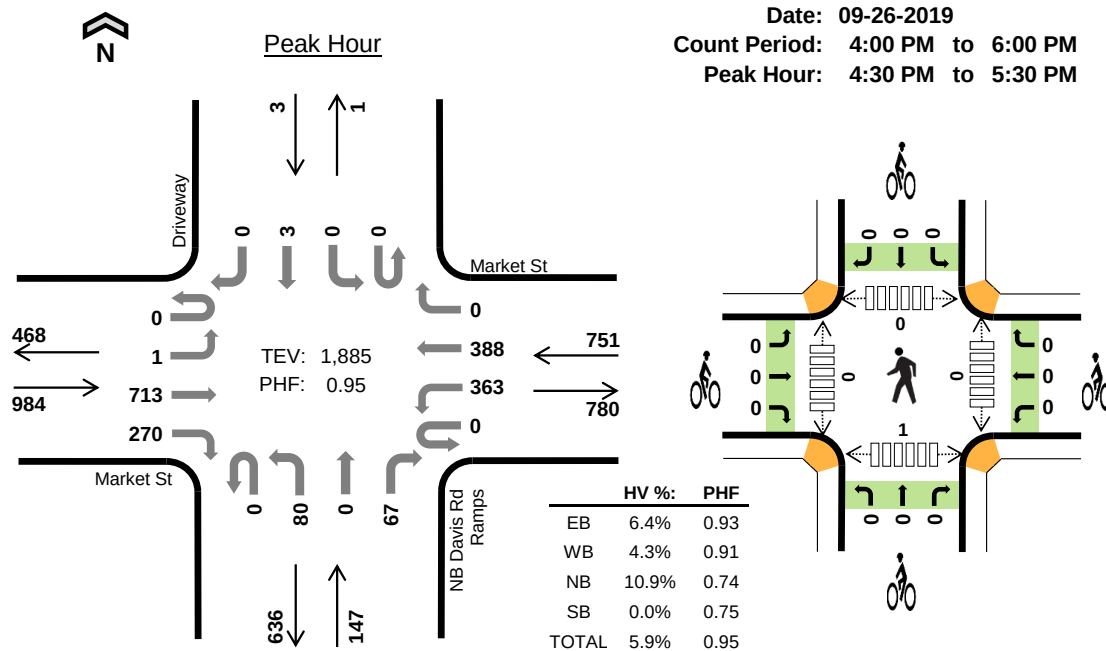
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	11	0	1	14	0	0	0	0	0	0	0	1	0	1
7:15 AM	7	12	3	0	22	0	0	0	0	0	0	0	1	1	2
7:30 AM	6	10	2	0	18	0	0	0	0	0	0	0	0	0	0
7:45 AM	6	9	3	0	18	0	0	0	0	0	0	0	0	0	0
8:00 AM	7	10	5	0	22	0	0	0	0	0	0	0	0	0	0
8:15 AM	10	15	5	0	30	1	0	0	0	1	0	0	0	0	0
8:30 AM	16	10	6	0	32	0	0	0	0	0	0	0	1	1	2
8:45 AM	10	14	6	0	30	0	0	0	0	0	0	0	2	0	2
Count Total	64	91	30	1	186	1	0	0	0	1	0	0	5	2	7
Peak Hour	29	44	15	0	88	1	0	0	0	1	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	4	7	0	0	0	0	0	0	1	0	0	14	0
7:15 AM	0	0	7	0	0	4	8	0	0	2	0	1	0	0	0	0	22	0
7:30 AM	0	0	6	0	0	2	8	0	0	1	0	1	0	0	0	0	18	0
7:45 AM	0	0	5	1	0	0	9	0	0	3	0	0	0	0	0	0	18	72
8:00 AM	0	0	6	1	0	1	8	1	0	3	0	2	0	0	0	0	22	80
8:15 AM	0	0	8	2	0	2	13	0	0	3	0	2	0	0	0	0	30	88
8:30 AM	0	0	15	1	0	2	8	0	0	1	0	5	0	0	0	0	32	102
8:45 AM	0	0	10	0	0	4	10	0	0	4	0	2	0	0	0	0	30	114
Count Total	0	0	59	5	0	19	71	1	0	17	0	13	0	1	0	0	186	0
Peak Hour	0	0	25	4	0	5	38	1	0	10	0	5	0	0	0	0	88	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Market St			Market St			NB Davis Rd Ramps			Driveway			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0				
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NB Davis Rd Ramps Market St



Two-Hour Count Summaries

Interval Start		Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	0	167	45	0	63	78	0	0	20	0	17	0	0	0	0	390	0
	4:15 PM	0	0	150	59	0	61	92	0	0	13	0	13	0	1	0	0	389	0
	4:30 PM	0	1	170	52	0	67	119	0	0	16	0	29	0	0	1	0	455	0
	4:45 PM	0	0	166	70	0	65	93	0	0	29	0	21	0	0	1	0	445	1,679
	5:00 PM	0	0	193	72	0	116	91	0	0	18	0	7	0	0	1	0	498	1,787
	5:15 PM	0	0	184	76	0	115	85	0	0	17	0	10	0	0	0	0	487	1,885
	5:30 PM	0	0	158	59	0	85	87	1	0	12	0	17	0	0	0	0	419	1,849
	5:45 PM	0	0	135	42	0	63	80	0	0	21	0	28	0	1	0	0	370	1,774
Count Total		0	1	1,323	475	0	635	725	1	0	146	0	142	0	2	3	0	3,453	0
Peak Hour	All	0	1	713	270	0	363	388	0	0	80	0	67	0	0	3	0	1,885	0
	HV	0	0	58	5	0	7	25	0	0	10	0	6	0	0	0	0	111	0
	HV%	-	0%	8%	2%	-	2%	6%	-	-	13%	-	9%	-	-	0%	-	6%	0

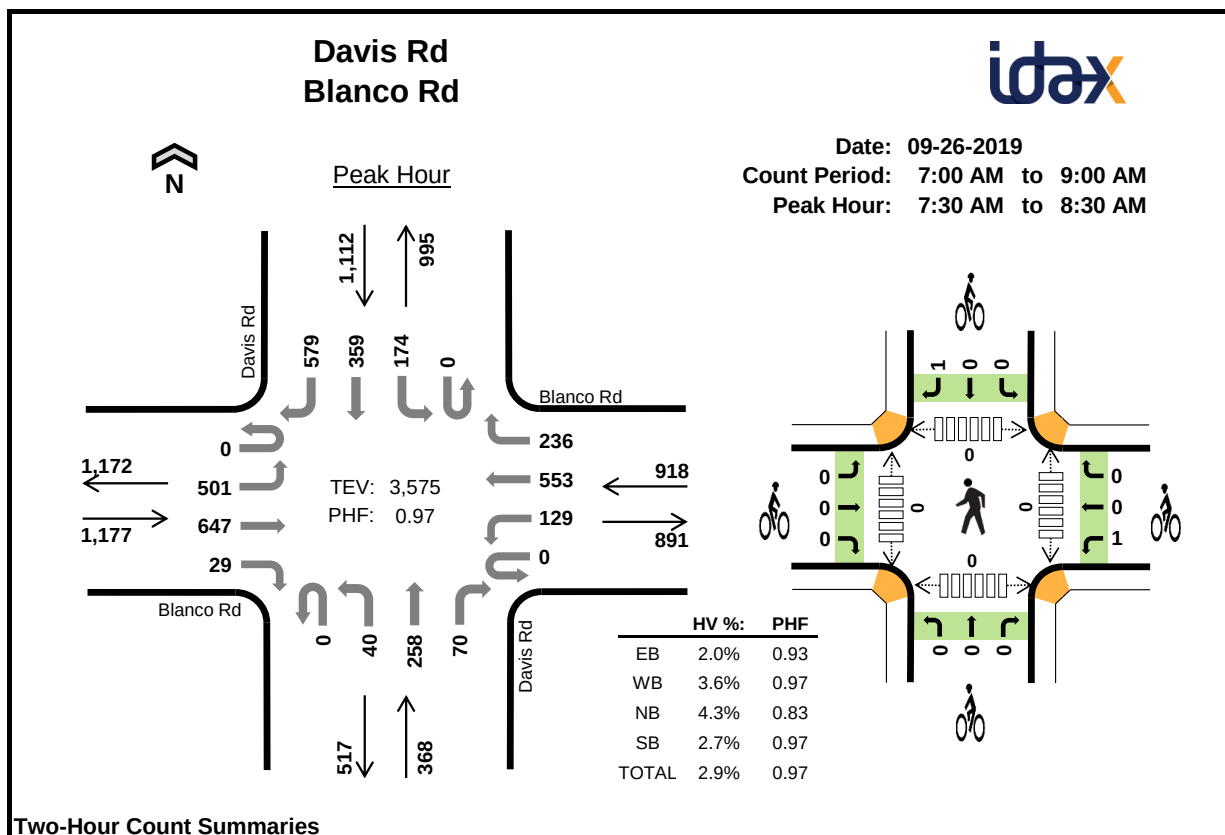
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	18	6	6	0	30	0	0	0	0	0	0	0	1	0	1
4:15 PM	12	11	5	0	28	0	0	1	0	1	0	0	0	0	0
4:30 PM	17	7	5	0	29	0	0	0	0	0	0	0	0	0	0
4:45 PM	14	11	8	0	33	0	0	0	0	0	0	0	0	0	0
5:00 PM	21	8	2	0	31	0	0	0	0	0	0	0	0	0	0
5:15 PM	11	6	1	0	18	0	0	0	0	0	0	0	0	1	1
5:30 PM	19	10	2	0	31	0	0	0	0	0	0	0	0	2	2
5:45 PM	14	10	9	0	33	0	0	0	0	0	0	0	0	0	0
Count Total	126	69	38	0	233	0	0	1	0	1	0	0	1	3	4
Peak Hour	63	32	16	0	111	0	0	0	0	0	0	0	0	1	1

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	16	2	0	2	4	0	0	3	0	3	0	0	0	0	30	0
4:15 PM	0	0	11	1	0	3	8	0	0	3	0	2	0	0	0	0	28	0
4:30 PM	0	0	16	1	0	1	6	0	0	3	0	2	0	0	0	0	29	0
4:45 PM	0	0	12	2	0	1	10	0	0	5	0	3	0	0	0	0	33	120
5:00 PM	0	0	20	1	0	3	5	0	0	1	0	1	0	0	0	0	31	121
5:15 PM	0	0	10	1	0	2	4	0	0	1	0	0	0	0	0	0	18	111
5:30 PM	0	0	16	3	0	4	5	1	0	2	0	0	0	0	0	0	31	113
5:45 PM	0	0	13	1	0	2	8	0	0	6	0	3	0	0	0	0	33	113
Count Total	0	0	114	12	0	18	50	1	0	24	0	14	0	0	0	0	233	0
Peak Hour	0	0	58	5	0	7	25	0	0	10	0	6	0	0	0	0	111	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Market St			Market St			NB Davis Rd Ramps			Driveway			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Two-Hour Count Summaries

Interval Start		Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	73	56	2	0	50	151	38	0	6	33	11	0	18	103	181	722	0
	7:15 AM	0	104	87	4	0	33	115	44	0	7	68	5	0	23	93	164	747	0
	7:30 AM	0	142	148	3	0	39	129	63	0	14	59	22	0	34	91	159	903	0
	7:45 AM	0	127	180	7	0	24	125	66	0	9	85	17	0	45	85	132	902	3,274
	8:00 AM	0	141	163	12	0	39	138	59	0	11	57	18	0	49	98	140	925	3,477
	8:15 AM	0	91	156	7	0	27	161	48	0	6	57	13	0	46	85	148	845	3,575
	8:30 AM	0	87	109	4	1	11	126	58	0	9	70	11	0	51	65	151	753	3,425
	8:45 AM	0	91	128	1	0	15	126	54	0	4	42	16	0	43	57	116	693	3,216
Count Total		0	856	1,027	40	1	238	1,071	430	0	66	471	113	0	309	677	1,191	6,490	0
Peak Hour	All	0	501	647	29	0	129	553	236	0	40	258	70	0	174	359	579	3,575	0
	HV	0	3	15	5	0	3	21	9	0	6	10	0	0	5	13	12	102	0
	HV%	-	1%	2%	17%	-	2%	4%	4%	-	15%	4%	0%	-	3%	4%	2%	3%	0

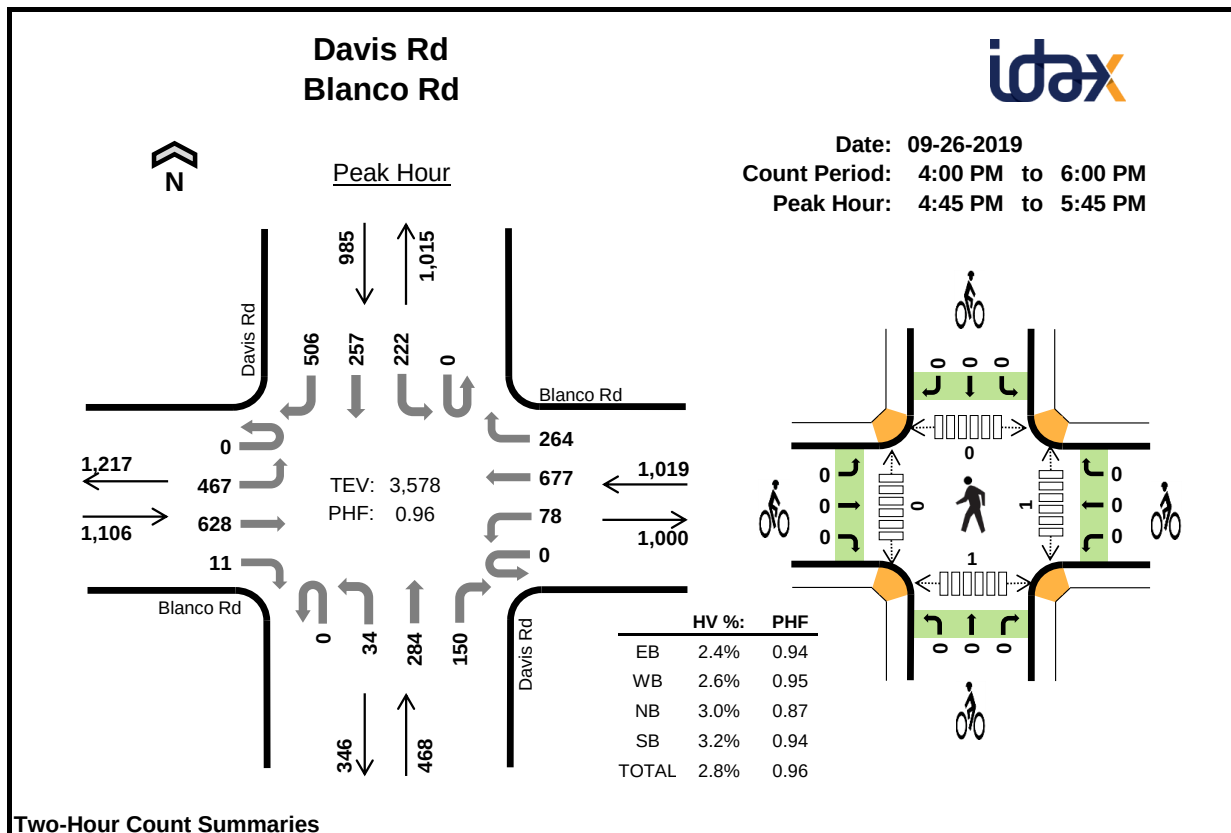
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	7	1	5	19	0	0	0	0	0	1	0	0	0	1
7:15 AM	4	10	5	7	26	0	0	0	0	0	0	0	0	0	0
7:30 AM	6	9	4	14	33	0	0	0	0	0	0	0	0	0	0
7:45 AM	5	6	4	5	20	0	1	0	0	1	0	0	0	0	0
8:00 AM	3	10	3	6	22	0	0	0	0	0	0	0	0	0	0
8:15 AM	9	8	5	5	27	0	0	0	1	1	0	0	0	0	0
8:30 AM	4	10	7	11	32	0	0	0	1	1	0	0	0	0	0
8:45 AM	5	11	6	10	32	0	0	0	0	0	0	0	0	0	0
Count Total	42	71	35	63	211	0	1	0	2	3	1	0	0	0	1
Peak Hour	23	33	16	30	102	0	1	0	1	2	0	0	0	0	0

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	0	0	0	6	1	0	1	0	0	0	2	3	0	19	0
7:15 AM	0	2	1	1	0	0	6	4	0	4	1	0	0	0	4	3	26	0
7:30 AM	0	0	5	1	0	2	5	2	0	2	2	0	0	3	8	3	33	0
7:45 AM	0	0	3	2	0	1	3	2	0	2	2	0	0	0	3	2	20	98
8:00 AM	0	0	3	0	0	0	8	2	0	2	1	0	0	1	1	4	22	101
8:15 AM	0	3	4	2	0	0	5	3	0	0	5	0	0	1	1	3	27	102
8:30 AM	0	2	2	0	0	0	7	3	0	0	6	1	0	4	6	1	32	101
8:45 AM	0	2	3	0	0	0	7	4	0	3	3	0	0	2	4	4	32	113
Count Total	0	9	27	6	0	3	47	21	0	14	20	1	0	13	30	20	211	0
Peak Hour	0	3	15	5	0	3	21	9	0	6	10	0	0	5	13	12	102	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Blanco Rd			Blanco Rd			Davis Rd			Davis Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	1				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	3				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
Count Total	0	0	0	1	0	0	0	0	0	0	0	2	3	0				
Peak Hour	0	0	0	1	0	0	0	0	0	0	0	1	2	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	112	143	4	0	13	128	70	0	7	67	31	0	53	74	124	826	0
4:15 PM		0	172	164	3	0	19	113	59	0	11	52	48	0	53	56	114	864	0
4:30 PM		0	158	150	2	0	23	131	46	0	6	67	32	0	40	68	125	848	0
4:45 PM		0	138	153	2	0	18	154	86	0	8	68	33	0	39	55	125	879	3,417
5:00 PM		0	105	165	3	0	15	183	59	0	4	90	28	0	62	75	118	907	3,498
5:15 PM		0	111	152	2	0	27	185	56	0	12	73	49	0	53	75	134	929	3,563
5:30 PM		0	113	158	4	0	18	155	63	0	10	53	40	0	68	52	129	863	3,578
5:45 PM		0	133	131	3	0	20	103	50	0	6	68	37	0	64	69	120	804	3,503
Count Total		0	1,042	1,216	23	0	153	1,152	489	0	64	538	298	0	432	524	989	6,920	0
Peak Hour	All	0	467	628	11	0	78	677	264	0	34	284	150	0	222	257	506	3,578	0
	HV	0	8	17	1	0	2	16	9	0	9	5	0	0	11	18	3	99	0
	HV%	-	2%	3%	9%	-	3%	2%	3%	-	26%	2%	0%	-	5%	7%	1%	3%	0

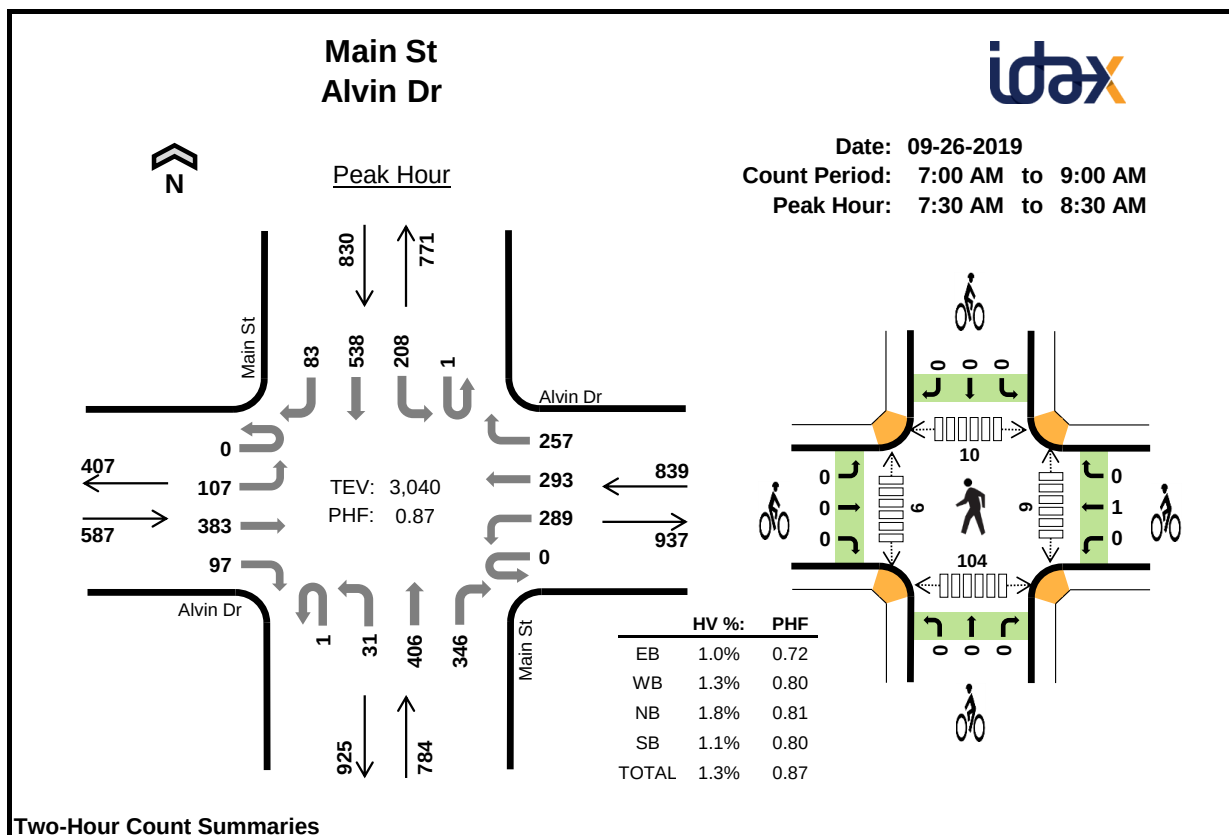
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	7	6	9	27	0	0	0	0	0	0	0	0	0	0
4:15 PM	13	9	7	9	38	0	0	0	0	0	0	0	0	0	0
4:30 PM	7	6	2	6	21	0	0	0	0	0	0	0	0	0	0
4:45 PM	7	9	6	5	27	0	0	0	0	0	0	0	0	0	0
5:00 PM	6	3	2	9	20	0	0	0	0	0	0	0	0	0	0
5:15 PM	4	7	1	6	18	0	0	0	0	0	1	0	0	1	2
5:30 PM	9	8	5	12	34	0	0	0	0	0	0	0	0	0	0
5:45 PM	6	8	3	11	28	0	0	0	0	0	0	0	0	0	0
Count Total	57	57	32	67	213	0	0	0	0	0	1	0	0	1	2
Peak Hour	26	27	14	32	99	0	0	0	0	0	1	0	0	1	2

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	3	0	0	4	3	0	2	4	0	0	4	4	1	27	0
4:15 PM	0	3	8	2	0	1	7	1	0	4	2	1	0	3	5	1	38	0
4:30 PM	0	1	6	0	0	0	5	1	0	1	1	0	0	4	2	0	21	0
4:45 PM	0	5	2	0	0	1	5	3	0	5	1	0	0	0	3	2	27	113
5:00 PM	0	0	6	0	0	0	2	1	0	1	1	0	0	3	5	1	20	106
5:15 PM	0	1	3	0	0	1	4	2	0	1	0	0	0	2	4	0	18	86
5:30 PM	0	2	6	1	0	0	5	3	0	2	3	0	0	6	6	0	34	99
5:45 PM	0	2	2	2	0	0	6	2	0	2	1	0	0	4	7	0	28	100
Count Total	0	15	34	8	0	3	38	16	0	18	13	1	0	26	36	5	213	0
Peak Hour	0	8	17	1	0	2	16	9	0	9	5	0	0	11	18	3	99	0

Two-Hour Count Summaries - Bikes																
Interval Start	Blanco Rd			Blanco Rd			Davis Rd			Davis Rd			15-min Total	Rolling One Hour		
	Eastbound			Westbound			Northbound			Southbound						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	13	29	16	0	48	25	22	0	7	47	33	0	12	75	10	337	0
	7:15 AM	0	27	38	28	0	62	30	21	3	8	46	40	0	18	94	13	428	0
	7:30 AM	0	28	81	32	0	78	44	57	0	5	71	76	0	49	114	16	651	0
	7:45 AM	0	25	149	30	0	72	90	57	1	4	84	104	0	73	168	18	875	2,291
	8:00 AM	0	29	84	20	0	78	97	88	0	14	122	105	1	55	145	32	870	2,824
	8:15 AM	0	25	69	15	0	61	62	55	0	8	129	61	0	31	111	17	644	3,040
	8:30 AM	0	16	40	19	0	79	51	43	1	6	112	62	1	33	127	15	605	2,994
	8:45 AM	0	25	24	15	0	58	29	22	2	7	116	52	1	20	138	23	532	2,651
Count Total		0	188	514	175	0	536	428	365	7	59	727	533	3	291	972	144	4,942	0
Peak Hour	All	0	107	383	97	0	289	293	257	1	31	406	346	1	208	538	83	3,040	0
	HV	0	1	2	3	0	3	5	3	0	1	7	6	0	3	6	0	40	0
	HV%	-	1%	1%	3%	-	1%	2%	1%	0%	3%	2%	2%	0%	1%	1%	0%	1%	0

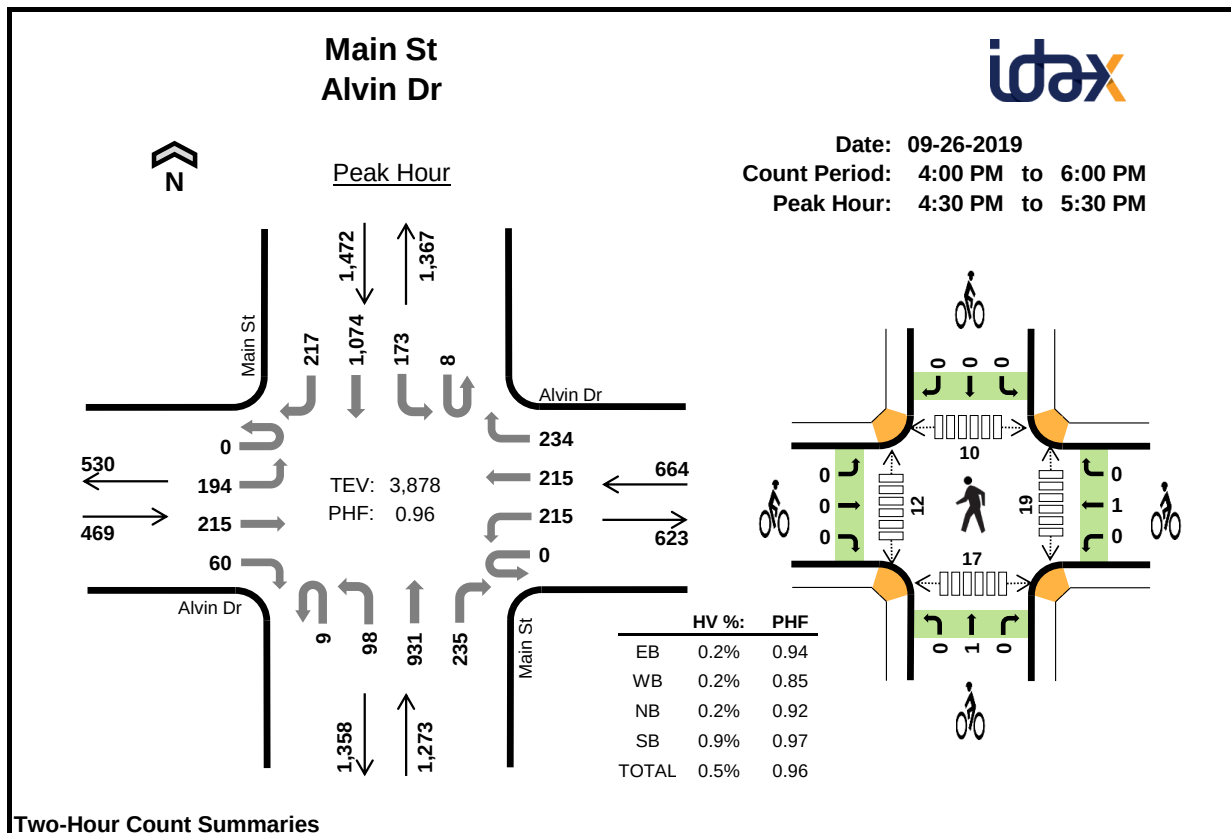
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	5	4	2	12	0	0	0	0	0	0	2	4	1	7
7:15 AM	3	3	1	4	11	0	0	0	0	0	2	0	2	9	13
7:30 AM	2	4	5	2	13	0	0	0	0	0	1	2	0	29	32
7:45 AM	1	5	3	3	12	0	0	0	0	0	3	1	5	50	59
8:00 AM	1	2	1	1	5	0	1	0	0	1	4	1	3	15	23
8:15 AM	2	0	5	3	10	0	0	0	0	0	1	2	2	10	15
8:30 AM	2	6	4	1	13	0	0	0	1	1	4	1	3	1	9
8:45 AM	0	3	4	0	7	0	0	0	0	0	0	1	0	5	6
Count Total	12	28	27	16	83	0	1	0	1	2	15	10	19	120	164
Peak Hour	6	11	14	9	40	0	1	0	0	1	9	6	10	104	129

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	2	1	2	0	0	1	3	0	1	0	1	12	0
7:15 AM	0	0	1	2	0	0	2	1	0	0	1	0	0	2	2	0	11	0
7:30 AM	0	0	1	1	0	2	1	1	0	0	1	4	0	2	0	0	13	0
7:45 AM	0	0	0	1	0	0	3	2	0	0	3	0	0	1	2	0	12	48
8:00 AM	0	1	0	0	0	1	1	0	0	0	1	0	0	0	1	0	5	41
8:15 AM	0	0	1	1	0	0	0	0	0	1	2	2	0	0	3	0	10	40
8:30 AM	0	0	0	2	0	3	2	1	0	0	3	1	0	1	0	0	13	40
8:45 AM	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	0	7	35
Count Total	0	1	4	7	0	11	10	7	0	1	16	10	0	7	8	1	83	0
Peak Hour	0	1	2	3	0	3	5	3	0	1	7	6	0	3	6	0	40	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Alvin Dr			Alvin Dr			Main St			Main St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	1				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
Count Total	0	0	0	0	1	0	0	0	0	0	0	1	2	0				
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	42	36	22	0	61	50	45	3	24	217	50	1	42	190	51	834	0
4:15 PM		0	40	44	16	0	58	38	50	3	15	228	53	0	37	241	47	870	0
4:30 PM		0	58	44	13	0	54	42	43	3	33	242	56	1	48	273	58	968	0
4:45 PM		0	48	52	13	0	48	50	62	2	23	223	47	3	42	271	44	928	3,600
5:00 PM		0	45	58	13	0	61	71	64	2	17	223	57	2	42	251	61	967	3,733
5:15 PM		0	43	61	21	0	52	52	65	2	25	243	75	2	41	279	54	1,015	3,878
5:30 PM		0	51	44	29	0	59	56	38	2	24	263	59	2	49	251	40	967	3,877
5:45 PM		0	70	51	21	0	56	46	48	2	24	218	61	0	44	212	52	905	3,854
Count Total		0	397	390	148	0	449	405	415	19	185	1,857	458	11	345	1,968	407	7,454	0
Peak Hour	All	0	194	215	60	0	215	215	234	9	98	931	235	8	173	1,074	217	3,878	0
	HV	0	0	1	0	0	0	1	0	0	0	3	0	0	1	12	0	18	0
	HV%	-	0%	0%	0%	-	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0

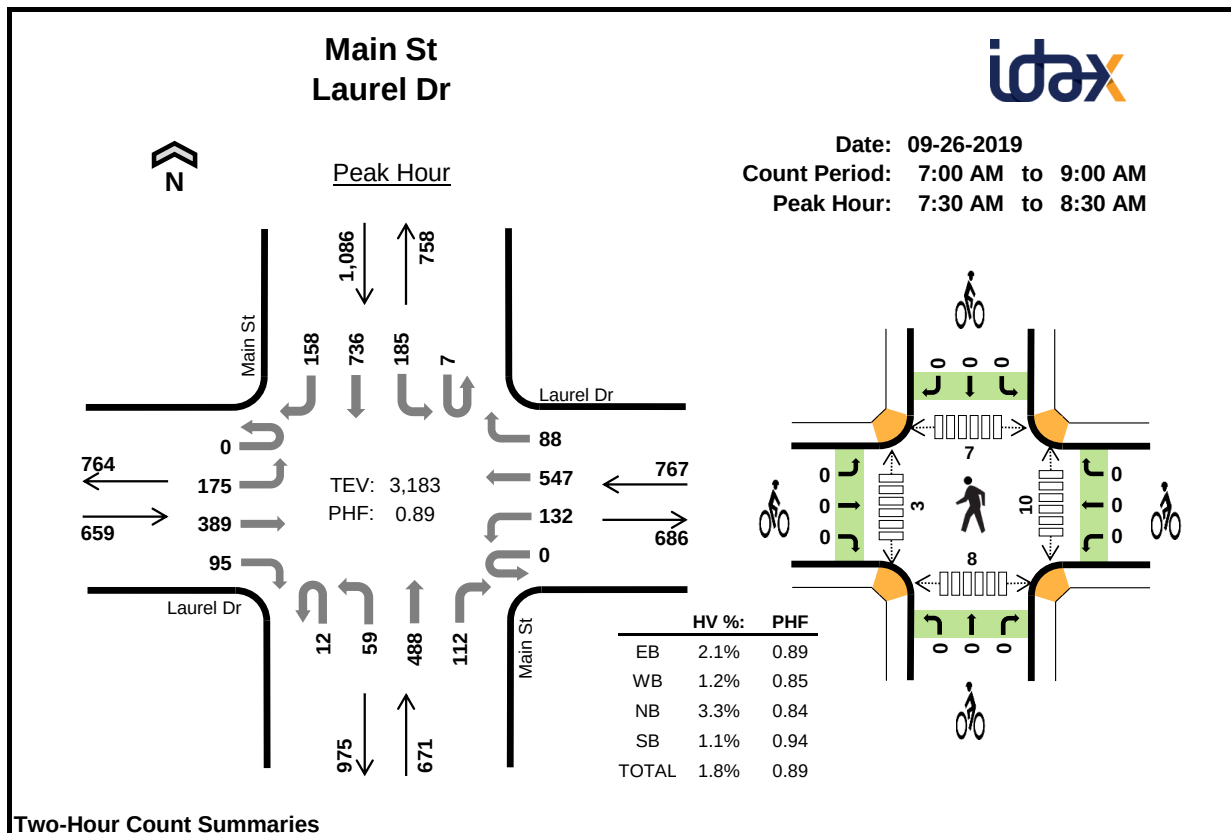
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	2	4	0	0	2	0	2	1	7	8	7	23
4:15 PM	1	0	0	7	8	0	0	0	0	0	6	3	7	7	23
4:30 PM	0	1	2	3	6	0	0	0	0	0	5	4	6	6	21
4:45 PM	1	0	1	4	6	0	0	0	0	0	13	4	3	5	25
5:00 PM	0	0	0	3	3	0	1	1	0	2	1	2	0	2	5
5:15 PM	0	0	0	3	3	0	0	0	0	0	0	2	1	4	7
5:30 PM	0	0	0	2	2	0	0	0	0	0	3	6	5	4	18
5:45 PM	0	0	1	0	1	1	0	0	1	2	4	2	1	2	9
Count Total	3	1	5	24	33	1	1	3	1	6	33	30	31	37	131
Peak Hour	1	1	3	13	18	0	1	1	0	2	19	12	10	17	58

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	4	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5	1	8	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	3	0	6	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	4	0	6	24
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	23
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	18
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	14
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	9
Count Total	0	0	1	2	0	0	1	0	0	0	5	0	0	2	21	1	33	0
Peak Hour	0	0	1	0	0	0	1	0	0	0	3	0	0	1	12	0	18	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Alvin Dr			Alvin Dr			Main St			Main St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	2				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2				
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2	4				
Count Total	0	1	0	0	1	0	1	2	0	0	1	0	6	0				
Peak Hour	0	0	0	0	1	0	0	1	0	0	0	0	2	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	7:00 AM	0	22	52	13	0	16	82	11	1	13	58	12	0	9	94	42	425	0
	7:15 AM	0	16	83	21	0	16	104	4	0	8	73	24	1	17	145	31	543	0
	7:30 AM	0	46	92	25	0	31	116	14	2	7	104	26	1	46	197	32	739	0
	7:45 AM	0	41	124	21	0	33	167	17	3	14	152	31	0	55	195	40	893	2,600
	8:00 AM	0	42	83	18	0	39	159	28	2	17	112	30	4	52	172	47	805	2,980
	8:15 AM	0	46	90	31	0	29	105	29	5	21	120	25	2	32	172	39	746	3,183
	8:30 AM	0	46	81	14	0	25	87	27	3	16	111	14	1	28	153	25	631	3,075
	8:45 AM	0	24	69	15	0	22	89	24	9	16	140	21	1	29	157	40	656	2,838
Count Total		0	283	674	158	0	211	909	154	25	112	870	183	10	268	1,285	296	5,438	0
Peak Hour	All	0	175	389	95	0	132	547	88	12	59	488	112	7	185	736	158	3,183	0
	HV	0	4	6	4	0	2	5	2	1	4	16	1	0	2	9	1	57	0
	HV%	-	2%	2%	4%	-	2%	1%	2%	8%	7%	3%	1%	0%	1%	1%	1%	2%	0

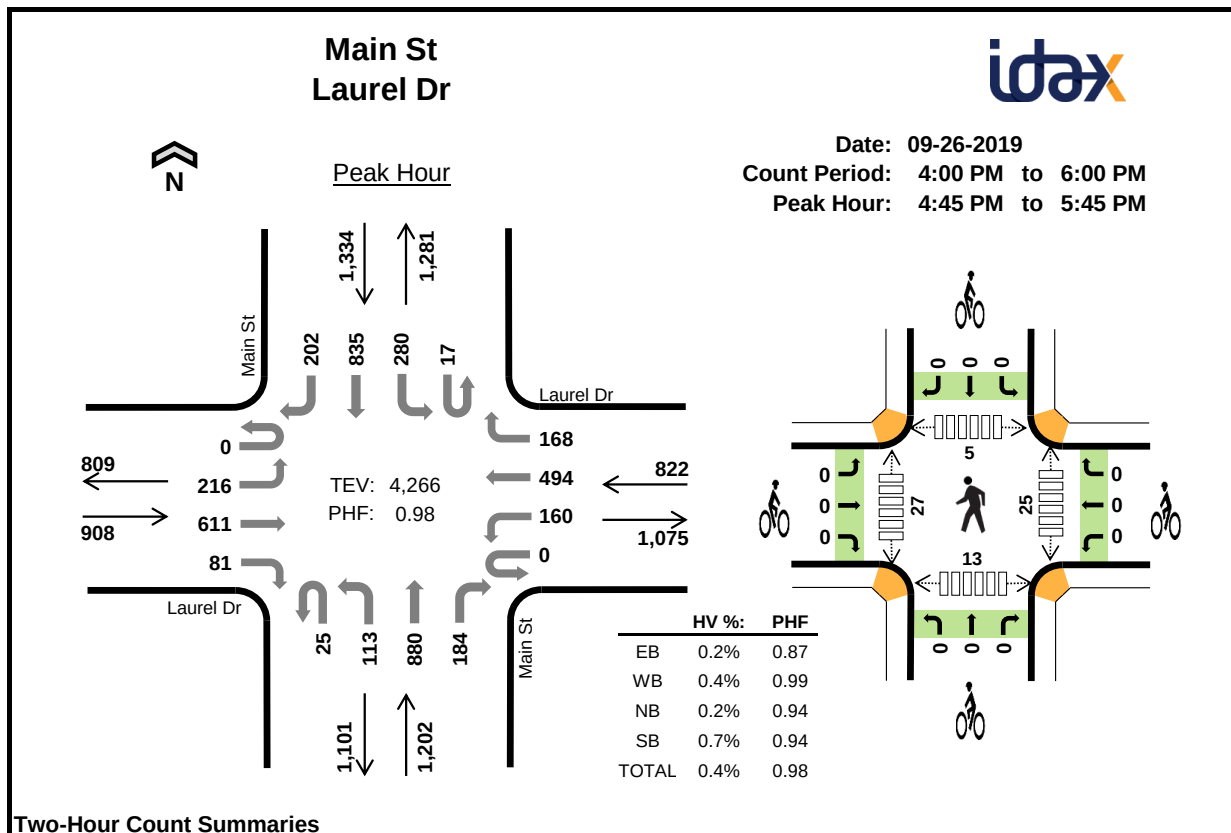
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	2	4	4	14	0	0	0	0	0	0	1	0	1	2
7:15 AM	4	0	3	2	9	0	0	0	0	0	0	2	1	2	5
7:30 AM	4	1	4	0	9	0	0	0	0	0	2	0	1	2	5
7:45 AM	4	1	6	5	16	0	0	0	0	0	1	1	4	2	8
8:00 AM	3	4	4	3	14	0	0	0	0	0	5	2	2	1	10
8:15 AM	3	3	8	4	18	0	0	0	0	0	2	0	0	3	5
8:30 AM	2	2	1	3	8	0	0	0	0	0	1	0	0	1	2
8:45 AM	1	3	6	4	14	0	0	0	0	0	1	0	1	2	4
Count Total	25	16	36	25	102	0	0	0	0	0	12	6	9	14	41
Peak Hour	14	9	22	12	57	0	0	0	0	0	10	3	7	8	28

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	1	2	0	0	2	0	0	0	4	0	0	1	1	2	14	0
7:15 AM	0	0	3	1	0	0	0	0	0	2	1	0	0	0	2	0	9	0
7:30 AM	0	2	1	1	0	0	1	0	0	0	4	0	0	0	0	0	9	0
7:45 AM	0	0	2	2	0	0	1	0	0	2	4	0	0	2	2	1	16	48
8:00 AM	0	0	3	0	0	2	1	1	0	2	1	1	0	0	3	0	14	48
8:15 AM	0	2	0	1	0	0	2	1	1	0	7	0	0	0	4	0	18	57
8:30 AM	0	0	2	0	0	1	1	0	0	0	1	0	0	0	3	0	8	56
8:45 AM	0	0	0	1	0	1	2	0	0	0	6	0	0	1	3	0	14	54
Count Total	0	5	12	8	0	4	10	2	1	6	28	1	0	4	18	3	102	0
Peak Hour	0	4	6	4	0	2	5	2	1	4	16	1	0	2	9	1	57	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Laurel Dr			Laurel Dr			Main St			Main St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
	4:00 PM	0	51	141	31	0	40	131	48	8	22	190	41	2	63	177	42	987	0
	4:15 PM	0	53	141	16	0	50	103	52	5	31	217	50	2	75	212	57	1,064	0
	4:30 PM	0	43	140	32	0	35	116	46	9	28	201	40	1	85	219	62	1,057	0
	4:45 PM	0	61	129	12	0	44	117	46	6	27	187	46	6	68	218	53	1,020	4,128
	5:00 PM	0	60	149	21	0	41	124	42	8	36	232	41	4	68	196	59	1,081	4,222
	5:15 PM	0	30	163	23	0	37	128	37	9	19	234	38	3	67	241	44	1,073	4,231
	5:30 PM	0	65	170	25	0	38	125	43	2	31	227	59	4	77	180	46	1,092	4,266
	5:45 PM	0	56	160	33	0	30	128	46	4	34	167	49	2	74	171	40	994	4,240
Count Total		0	419	1,193	193	0	315	972	360	51	228	1,655	364	24	577	1,614	403	8,368	0
Peak Hour	All	0	216	611	81	0	160	494	168	25	113	880	184	17	280	835	202	4,266	0
	HV	0	0	2	0	0	1	2	0	0	1	1	0	0	0	7	3	17	0
	HV%	-	0%	0%	0%	-	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	4	1	0	5	10	0	0	0	0	0	7	3	3	3	16
4:15 PM	0	2	2	4	8	0	0	0	0	0	3	9	2	2	16
4:30 PM	0	0	2	2	4	1	0	0	0	1	8	8	5	7	28
4:45 PM	0	2	2	3	7	0	0	0	0	0	6	5	1	6	18
5:00 PM	0	0	0	2	2	0	0	0	0	0	9	5	1	0	15
5:15 PM	2	1	0	4	7	0	0	0	0	0	7	9	2	3	21
5:30 PM	0	0	0	1	1	0	0	0	0	0	3	8	1	4	16
5:45 PM	7	0	1	0	8	0	1	0	0	1	7	7	2	4	20
Count Total	13	6	7	21	47	1	1	0	0	2	50	54	17	29	150
Peak Hour	2	3	2	10	17	0	0	0	0	0	25	27	5	13	70

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	3	0	0	1	0	0	0	0	0	0	1	2	2	10	0
4:15 PM	0	0	0	0	0	0	2	0	0	1	1	0	0	2	2	0	8	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	4	0
4:45 PM	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	3	7	29
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	21
5:15 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	4	0	7	20
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	17
5:45 PM	0	0	6	1	0	0	0	0	0	0	1	0	0	0	0	0	8	18
Count Total	0	0	9	4	0	1	5	0	0	3	4	0	0	3	13	5	47	0
Peak Hour	0	0	2	0	0	1	2	0	0	1	1	0	0	0	7	3	17	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Laurel Dr			Laurel Dr			Main St			Main St			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1				
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Appendix D

Volume Count

Comparison

Intersection 4 - North Davis Road / Calle Del Adobe - West Laurel Drive

Count	PM														Total	% Difference	
	Northbound				Southbound				Eastbound				Westbound				
	Left	Through	Right		Left	Through	Right		Left	Through	Right		Left	Through			Right
5/22/2019	12	497	902		499	491	31		28	327	7		676	348	497	4,315	
9/24/2019	18	514	985		490	554	40		24	342	13		684	432	516	4,612	
Difference	6	17	83		-9	63	9		-4	15	6		8	84	19	297	6.88%
Balanced	12	497	1,045		529	491	31		28	327	7		724	348	527	4,566	
Difference	6	17	-60		-39	63	9		-4	15	6		-40	84	-11	46	1.01%

Appendix E

Level of Service

Calculations

Existing

Conditions

HCM Signalized Intersection Capacity Analysis

Existing AM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	804	1008	17	21	432
Future Volume (vph)	210	804	1008	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	282	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	231	884	1108	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	231	884	1127	0	23	301
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.0	18.0
Effective Green, g (s)	58.7	59.1	46.0		18.7	19.1
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	354	2442	1886		390	356
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.38					c0.19
v/c Ratio	0.65	0.36	0.60		0.06	0.85
Uniform Delay, d1	9.1	5.2	13.1		26.1	31.4
Progression Factor	1.84	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.0	0.1	0.6		0.0	16.5
Delay (s)	20.7	2.1	13.7		26.1	48.0
Level of Service	C	A	B		C	D
Approach Delay (s)		5.9	13.7		46.9	
Approach LOS		A	B		D	
Intersection Summary						
HCM 2000 Control Delay			16.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			84.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			61.8%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Future Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	953	0	0	1311	271	311	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	953	0	0	1582	0	155	157	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.0	18.0	18.0			
Effective Green, g (s)		59.1			46.0		18.7	18.7	18.7			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2405			1842		358	359	337			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.6		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.1			3.4		0.8	0.9	0.1			
Delay (s)		5.5			14.5		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.5			14.5			28.4			0.0	
Approach LOS		A			B			C			A	
Intersection Summary												
HCM 2000 Control Delay			13.9			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			84.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			55.4%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑↑	↑↑		↑↑	↑		
Traffic Volume (veh/h)	0	946	1220	0	210	360		
Future Volume (veh/h)	0	946	1220	0	210	360		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1040	1341	0	231	396		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1656	1689	0	1119	515		
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1040	1341	0	231	396		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	9.7	13.9	0.0	2.1	10.0		
Cycle Q Clear(g_c), s	0.0	9.7	13.9	0.0	2.1	10.0		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1656	1689	0	1119	515		
V/C Ratio(X)	0.00	0.63	0.79	0.00	0.21	0.77		
Avail Cap(c_a), veh/h	0	2455	2503	0	1653	761		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	8.2	9.3	0.0	10.2	12.8		
Incr Delay (d2), s/veh	0.0	0.1	0.6	0.0	0.1	2.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	4.5	6.7	0.0	1.0	4.5		
LnGrp Delay(d),s/veh	0.0	8.4	9.9	0.0	10.2	15.0		
LnGrp LOS		A	A		B	B		
Approach Vol, veh/h		1040	1341		627			
Approach Delay, s/veh		8.4	9.9		13.2			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.0		18.1		25.0		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		11.7		12.0		15.9		
Green Ext Time (p_c), s		3.1		1.5		4.0		
Intersection Summary								
HCM 2010 Ctrl Delay			10.1					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	845	441	294	23	280	809	178	282	29
Future Volume (veh/h)	29	284	9	845	441	294	23	280	809	178	282	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	909	474	0	25	301	870	191	303	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	464	15	1144	1545	815	54	632	1421	266	728	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3150	320
Grp Volume(v), veh/h	31	154	161	909	474	0	25	301	870	191	164	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Cycle Q Clear(g_c), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	235	245	1144	1545	815	54	632	1421	266	397	405
V/C Ratio(X)	0.52	0.66	0.66	0.79	0.31	0.00	0.47	0.48	0.61	0.72	0.41	0.42
Avail Cap(c_a), veh/h	132	827	861	1366	2862	1404	114	1321	1961	329	710	724
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	37.1	27.3	16.3	0.0	43.6	33.5	4.2	41.1	29.9	29.8
Incr Delay (d2), s/veh	2.6	6.5	6.3	3.7	0.2	0.0	2.3	0.6	0.4	8.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	10.9	3.9	0.0	0.7	3.4	3.2	2.7	3.6	3.7
LnGrp Delay(d),s/veh	45.9	43.6	43.4	31.1	16.5	0.0	45.9	34.0	4.6	49.9	30.6	30.5
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1383			1196			525	
Approach Delay, s/veh		43.7			26.1			12.9			37.6	
Approach LOS		D			C			B			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	37.0	18.5	8.8	27.1	8.8	46.7	13.3	22.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	24.3	10.1	3.3	9.5	3.7	10.0	7.1	9.1				
Green Ext Time (p_c), s	6.7	2.9	0.0	1.3	0.0	5.4	0.2	6.9				
Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing AM

Intersection

Int Delay, s/veh 18.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	953	19
Future Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	953	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1061	13	129	1025	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	388	407	346	140	21	142	190	1700	21	160	1111	495
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5128	63	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	695	379	129	1025	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	388	407	346	161	0	142	190	1113	608	160	1111	495
V/C Ratio(X)	0.09	0.09	0.96	0.47	0.00	0.69	0.93	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	388	407	346	478	0	423	190	1113	608	211	1149	512
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	28.2	35.3	39.2	0.0	40.7	40.8	26.0	26.0	41.2	30.6	22.0
Incr Delay (d2), s/veh	0.1	0.1	38.6	2.1	0.0	5.8	44.7	1.1	2.0	15.3	12.0	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	0.7	0.7	12.1	1.9	0.0	2.7	6.8	7.6	8.5	3.9	14.4	0.4
LnGrp Delay(d),s/veh	28.3	28.2	73.9	41.3	0.0	46.5	85.6	27.1	28.0	56.5	42.6	22.1
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1250			1174	
Approach Delay, s/veh		66.1			44.3			35.6			43.8	
Approach LOS		E			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	35.0		14.4	14.4	36.6				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		22.0	11.2	27.9		7.6	8.6	18.1				
Green Ext Time (p_c), s		0.0	0.0	1.2		0.6	0.1	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			43.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	595	0	130	0	918	486	206	1160	0
Future Volume (veh/h)	0	0	0	595	0	130	0	918	486	206	1160	0
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	1845	1845	1900	0	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	0	633	0	138	0	977	517	219	1234	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	0	2	2	3	3	3
Cap, veh/h	0	452	0	1106	0	380	0	1316	589	268	2110	0
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.00	0.37	0.37	0.15	0.60	0.00
Sat Flow, veh/h	0	1863	0	3408	0	1568	0	3632	1583	1757	3597	0
Grp Volume(v), veh/h	0	0	0	633	0	138	0	977	517	219	1234	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1704	0	1568	0	1770	1583	1757	1752	0
Q Serve(g_s), s	0.0	0.0	0.0	8.9	0.0	3.8	0.0	12.3	15.7	6.2	11.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.9	0.0	3.8	0.0	12.3	15.7	6.2	11.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	452	0	1106	0	380	0	1316	589	268	2110	0
V/C Ratio(X)	0.00	0.00	0.00	0.57	0.00	0.36	0.00	0.74	0.88	0.82	0.58	0.00
Avail Cap(c_a), veh/h	0	579	0	1339	0	487	0	1316	589	273	2110	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(l)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	16.2	0.0	14.0	15.1	21.1	6.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.6	0.0	3.8	16.9	17.1	1.2	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	0.0	0.0	0.0	4.2	0.0	1.7	0.0	6.7	9.5	4.3	5.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	18.6	0.0	16.8	0.0	17.8	31.9	38.2	7.5	0.0
LnGrp LOS				B		B		B	C	D	A	
Approach Vol, veh/h		0			771			1494			1453	
Approach Delay, s/veh		0.0			18.3			22.7			12.1	
Approach LOS					B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.9	23.1		16.5		35.0		16.5				
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s	8.0	19.0		16.0		31.0		16.0				
Max Q Clear Time (g_c+l1), s	8.2	17.7		0.0		13.1		10.9				
Green Ext Time (p_c), s	0.0	1.0		0.0		8.5		1.6				
Intersection Summary												
HCM 2010 Ctrl Delay				17.7								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	6.8	0.0	37.0	0.3	0.1	8.5	11.9	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	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.4	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			525			873			1471	
Approach Delay, s/veh		64.8			48.5			30.0			38.8	
Approach LOS		E			D			C			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	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			44.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	451	142	98	344	3	154	0	174	7	2	0
Future Volume (veh/h)	0	451	142	98	344	3	154	0	174	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	550	173	120	420	4	188	0	212	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	719	225	151	1514	14	680	0	576	425	82	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2578	808	1630	3301	31	1471	0	1568	812	224	0
Grp Volume(v), veh/h	0	366	357	120	207	217	188	0	212	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1471	0	1568	1036	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	3.9	0.0	5.1	4.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	465	151	746	782	680	0	576	507	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.28	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	782	680	0	576	507	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(l)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.6	0.0	12.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.5	4.8	9.2	0.2	0.2	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.8	1.9	2.1	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.6	21.9	32.2	8.9	8.9	12.6	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		723			544			400			11	
Approach Delay, s/veh		21.8			14.0			13.2			10.6	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.3	18.9		23.5	0.0	28.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+l1), s		7.1	5.7	12.2		6.0	0.0	6.1				
Green Ext Time (p_c), s		1.4	0.1	2.3		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			17.1									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	97	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	97	164	346	3	99	1	106	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	111	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	808	141	233	1398	11	597	5	508	316	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2929	510	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	373	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1720	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.0	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.0	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	474	475	233	687	722	601	0	508	601	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	566	307	700	735	601	0	508	601	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.0	0.0	0.0
Incr Delay (d2), s/veh	49.4	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.0	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.6	24.5	24.6	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		749			590			237			2	
Approach Delay, s/veh		24.6			18.4			13.9			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.2	8.0	13.0		4.6	2.0	6.3				
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			20.6									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	501	647	29	129	553	236	40	258	70	174	359	579
Future Volume (veh/h)	501	647	29	129	553	236	40	258	70	174	359	579
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	516	667	30	133	570	0	41	266	72	179	370	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	609	982	44	167	706	316	67	691	183	217	627	533
Arrive On Green	0.18	0.28	0.28	0.10	0.20	0.00	0.04	0.25	0.25	0.12	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2714	721	1757	1845	1568
Grp Volume(v), veh/h	516	342	355	133	570	0	41	168	170	179	370	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	10.8	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Cycle Q Clear(g_c), s	10.8	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	609	504	522	167	706	316	67	442	433	217	627	533
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.61	0.38	0.39	0.82	0.59	0.00
Avail Cap(c_a), veh/h	669	545	565	221	837	374	117	442	433	247	627	533
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	23.7	23.7	33.0	28.3	0.0	35.3	23.0	23.0	31.9	20.3	0.0
Incr Delay (d2), s/veh	9.2	3.1	3.0	13.8	5.0	0.0	8.8	2.5	2.7	17.9	4.0	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	5.9	6.6	6.8	3.3	6.0	0.0	1.0	3.2	3.2	4.7	7.0	0.0
LnGrp Delay(d),s/veh	39.0	26.7	26.7	46.8	33.4	0.0	44.2	25.5	25.7	49.8	24.4	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1213			703			379			549	
Approach Delay, s/veh		31.9			35.9			27.6			32.7	
Approach LOS		C			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	13.7	23.5	11.7	25.8	7.4	29.9	17.7	19.7				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	9.4	8.2	7.6	14.8	3.7	14.4	12.8	13.7				
Green Ext Time (p_c), s	0.1	1.4	0.1	2.7	0.0	1.6	0.4	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			32.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Future Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
Arrive On Green	0.09	0.21	0.21	0.21	0.34	0.34	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	830	317	405	626	527	136	839	388	336	1555	479
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	27.1	25.8	29.5	20.7	20.8	36.5	25.2	28.9	33.9	21.0	19.7
Incr Delay (d2), s/veh	8.4	0.9	0.8	20.1	0.9	1.3	8.4	2.7	52.6	8.3	0.8	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	2.9	4.2	2.1	8.9	6.0	5.3	0.9	4.6	13.7	2.8	3.5	1.6
LnGrp Delay(d),s/veh	42.6	27.9	26.7	49.5	21.6	22.2	44.8	27.8	81.5	42.2	21.8	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		674			964			902			953	
Approach Delay, s/veh		30.4			31.4			52.2			26.8	
Approach LOS		C			C			D			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	11.7	23.5	20.6	20.9	7.2	28.0	11.3	30.3				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.2	13.8				
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.3									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Future Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	197	437	107	148	615	99	80	548	126	216	827	178
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	238	768	186	186	741	119	195	976	432	277	1267	271
Arrive On Green	0.13	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2820	685	1774	3051	490	3408	3505	1551	3442	4195	897
Grp Volume(v), veh/h	197	273	271	148	356	358	80	548	126	216	667	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Cycle Q Clear(g_c), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	238	482	472	186	430	430	195	976	432	277	1024	514
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.65	0.66
Avail Cap(c_a), veh/h	247	482	473	231	467	467	250	976	432	277	1024	514
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	28.8	21.4	21.4	29.8	24.5	24.5	31.0	21.0	19.3	30.8	20.7	20.7
Incr Delay (d2), s/veh	19.7	1.5	1.7	14.3	11.2	11.4	1.4	2.3	1.7	13.1	3.2	6.5
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	4.9	4.6	4.6	3.4	7.7	7.7	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	48.4	22.9	23.1	44.1	35.7	35.9	32.4	23.4	21.0	43.9	23.9	27.2
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		741			862			754			1221	
Approach Delay, s/veh		29.8			37.2			23.9			28.4	
Approach LOS		C			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	10.0	23.5	11.6	23.1	8.4	25.1	13.7	21.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.2	11.1	7.6	11.2	3.5	13.8	9.4	15.1				
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			29.9									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

Existing PM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	442	1343	878	30	37	309
Future Volume (vph)	442	1343	878	30	37	309
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.18	1.00	1.00		0.95	1.00
Satd. Flow (perm)	326	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	446	1357	887	30	37	312
RTOR Reduction (vph)	0	0	0	0	0	238
Lane Group Flow (vph)	446	1357	917	0	37	74
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.4	58.4	37.3		19.6	19.6
Effective Green, g (s)	59.1	59.5	38.4		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	504	2401	1534		413	377
v/s Ratio Prot	c0.18	0.39	0.26		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.88	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.0	7.0	18.3		26.0	26.4
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	13.1	0.3	0.7		0.1	0.2
Delay (s)	31.8	4.2	19.1		26.1	26.6
Level of Service	C	A	B		C	C
Approach Delay (s)		11.0	19.1		26.5	
Approach LOS		B	B		C	
Intersection Summary						
HCM 2000 Control Delay			15.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			86.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			65.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1428	0	0	958	229	418	3	357	0	0	0
Future Volume (vph)	0	1428	0	0	958	229	418	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3366		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3366		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1519	0	0	1019	244	445	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1519	0	0	1263	0	222	226	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.4			37.3		19.6	19.6	19.6			
Effective Green, g (s)		59.5			38.4		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2389			1489		387	388	364			
v/s Ratio Prot		c0.44			c0.38		0.13	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.57	0.58	0.89			
Uniform Delay, d1		7.6			21.6		29.4	29.5	32.1			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.3		2.1	2.2	21.8			
Delay (s)		8.2			13.9		31.5	31.7	53.9			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.2			13.9			41.9			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			17.9			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			86.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			68.2%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1429	1239	0	388	360		
Future Volume (veh/h)	0	1429	1239	0	388	360		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1489	1291	0	404	375		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1816	1816	0	1062	489		
Arrive On Green	0.00	0.52	0.52	0.00	0.31	0.31		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1489	1291	0	404	375		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	16.6	13.1	0.0	4.3	10.1		
Cycle Q Clear(g_c), s	0.0	16.6	13.1	0.0	4.3	10.1		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1816	1816	0	1062	489		
V/C Ratio(X)	0.00	0.82	0.71	0.00	0.38	0.77		
Avail Cap(c_a), veh/h	0	2546	2546	0	1344	618		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.3	8.5	0.0	12.4	14.4		
Incr Delay (d2), s/veh	0.0	1.1	0.2	0.0	0.2	4.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.1	6.2	0.0	2.0	4.8		
LnGrp Delay(d),s/veh	0.0	10.4	8.7	0.0	12.6	18.4		
LnGrp LOS		B	A		B	B		
Approach Vol, veh/h		1489	1291		779			
Approach Delay, s/veh		10.4	8.7		15.4			
Approach LOS		B	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.3		18.1		28.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+l1), s		18.6		12.1		15.1		
Green Ext Time (p_c), s		4.6		1.5		4.1		
Intersection Summary								
HCM 2010 Ctrl Delay			10.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	724	348	527	12	497	1045	529	491	31
Future Volume (veh/h)	28	327	7	724	348	527	12	497	1045	529	491	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	754	362	0	12	518	1089	551	511	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	54	504	10	773	1203	812	29	835	1290	601	1333	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3349	209
Grp Volume(v), veh/h	29	170	178	754	362	0	12	518	1089	551	267	276
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.8	10.9	25.2	8.6	0.0	0.8	15.0	17.0	18.0	12.3	12.3
Cycle Q Clear(g_c), s	1.9	10.8	10.9	25.2	8.6	0.0	0.8	15.0	17.0	18.0	12.3	12.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	54	251	263	773	1203	812	29	835	1290	601	697	719
V/C Ratio(X)	0.54	0.68	0.68	0.98	0.30	0.00	0.41	0.62	0.84	0.92	0.38	0.38
Avail Cap(c_a), veh/h	104	691	722	773	2003	1170	93	1050	1459	601	741	764
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	45.7	45.7	43.4	27.0	0.0	55.2	38.6	8.6	45.9	24.3	24.2
Incr Delay (d2), s/veh	3.1	6.6	6.4	26.5	0.3	0.0	3.4	0.8	4.3	19.8	0.3	0.3
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	0.9	5.5	5.8	14.6	4.2	0.0	0.4	7.4	7.1	10.1	6.0	6.2
LnGrp Delay(d),s/veh	57.3	52.3	52.0	69.9	27.3	0.0	58.6	39.4	12.9	65.7	24.6	24.6
LnGrp LOS	E	D	D	E	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1116			1619			1094	
Approach Delay, s/veh		52.5			56.1			21.7			45.3	
Approach LOS		D			E			C			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	32.0	22.4	7.9	51.2	9.1	45.3	26.0	33.0				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	27.2	12.9	2.8	14.3	3.9	10.6	20.0	19.0				
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7				
Intersection Summary												
HCM 2010 Ctrl Delay			39.7									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing PM

Intersection

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	21.9	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	106	11	174	203	1290	16	210	932	40
Future Volume (veh/h)	90	29	211	106	11	174	203	1290	16	210	932	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	107	11	176	205	1303	16	212	941	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	306	258	237	24	231	239	1490	18	245	1032	458
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.29	0.29
Sat Flow, veh/h	1757	1845	1554	1616	166	1570	1774	5178	64	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	118	0	176	205	853	466	212	941	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.1	12.2	5.5	0.0	9.9	10.4	22.0	22.0	10.7	23.6	1.7
Cycle Q Clear(g_c), s	2.7	3.1	12.2	5.5	0.0	9.9	10.4	22.0	22.0	10.7	23.6	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	291	306	258	262	0	231	239	976	533	245	1032	458
V/C Ratio(X)	0.21	0.24	0.83	0.45	0.00	0.76	0.86	0.87	0.87	0.86	0.91	0.09
Avail Cap(c_a), veh/h	382	401	338	485	0	427	251	1033	564	251	1078	479
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	33.3	37.1	35.2	0.0	37.7	38.9	31.1	31.1	38.7	31.4	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.1	1.2	0.0	5.2	23.7	8.2	13.8	25.0	11.3	0.1
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	1.3	1.6	6.1	2.8	0.0	4.6	6.6	11.4	13.3	6.9	13.1	0.7
LnGrp Delay(d),s/veh	33.4	33.7	49.2	36.4	0.0	42.8	62.6	39.3	44.9	63.8	42.7	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			294			1524			1193	
Approach Delay, s/veh		43.2			40.2			44.2			45.8	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.2	18.4	32.8		19.5	18.7	32.4				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		14.2	12.4	25.6		11.9	12.7	24.0				
Green Ext Time (p_c), s		0.7	0.0	1.2		1.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			44.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	428	0	225	0	1282	676	144	1012	0
Future Volume (veh/h)	0	0	0	428	0	225	0	1282	676	144	1012	0
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	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	470	0	247	0	1409	743	158	1112	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	0	396	0	990	0	337	0	1646	736	190	2279	0
Arrive On Green	0.00	0.00	0.00	0.21	0.00	0.21	0.00	0.47	0.47	0.11	0.64	0.00
Sat Flow, veh/h	0	1863	0	3442	0	1583	0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	0	0	0	470	0	247	0	1409	743	158	1112	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1721	0	1583	0	1770	1583	1774	1770	0
Q Serve(g_s), s	0.0	0.0	0.0	7.0	0.0	8.1	0.0	19.8	26.0	4.9	9.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.0	0.0	8.1	0.0	19.8	26.0	4.9	9.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	396	0	990	0	337	0	1646	736	190	2279	0
V/C Ratio(X)	0.00	0.00	0.00	0.47	0.00	0.73	0.00	0.86	1.01	0.83	0.49	0.00
Avail Cap(c_a), veh/h	0	533	0	1243	0	453	0	1646	736	190	2279	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)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.1	0.0	20.5	0.0	13.3	14.9	24.4	5.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	4.1	0.0	5.9	35.4	25.4	0.7	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	0.0	0.0	0.0	3.3	0.0	3.9	0.0	10.9	18.3	3.7	4.6	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.4	0.0	24.6	0.0	19.2	50.3	49.8	5.9	0.0
LnGrp LOS				C		C		B	F	D	A	
Approach Vol, veh/h		0			717			2152			1270	
Approach Delay, s/veh		0.0			21.8			30.0			11.4	
Approach LOS					C			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	30.0		15.9		40.0		15.9				
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s	6.0	26.0		16.0		36.0		16.0				
Max Q Clear Time (g_c+I1), s	6.9	28.0		0.0		11.1		10.1				
Green Ext Time (p_c), s	0.0	0.0		0.0		8.8		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				22.9								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	340	126	130	285	236	166	1230	131	177	791	157
Future Volume (veh/h)	227	340	126	130	285	236	166	1230	131	177	791	157
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	354	131	135	297	0	173	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	354	131	135	297	0	173	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.6	6.7	13.3	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.6	6.7	13.3	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
V/C Ratio(X)	0.85	0.92	0.41	0.86	0.74	0.00	0.83	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1371	613
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	32.9	0.0	38.7	26.4	18.4	38.9	21.9	0.0
Incr Delay (d2), s/veh	21.9	26.9	0.8	35.9	7.4	0.0	19.2	11.8	0.2	33.2	0.7	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	3.7	11.4	2.9	4.9	7.7	0.0	5.3	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	61.8	31.6	76.2	40.3	0.0	57.9	38.2	18.6	72.1	22.6	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		721			432			1590			1008	
Approach Delay, s/veh		56.5			51.5			38.7			31.7	
Approach LOS		E			D			D			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	15.0	39.2	12.4	23.0	15.0	39.2	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.5	18.7	8.1	15.3				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			41.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	813	145	89	375	4	85	2	164	5	0	1
Future Volume (veh/h)	0	813	145	89	375	4	85	2	164	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	830	148	91	383	4	87	2	167	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	986	176	114	1673	17	598	12	524	443	11	67
Arrive On Green	0.00	0.34	0.34	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2862	510	1675	3389	35	1365	36	1524	941	32	194
Grp Volume(v), veh/h	0	489	489	91	189	198	89	0	167	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1401	0	1524	1167	0	0
Q Serve(g_s), s	0.0	14.9	14.9	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.9	14.9	3.0	3.6	3.6	2.0	0.0	4.5	2.0	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	581	581	114	825	865	611	0	524	521	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.23	0.23	0.15	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	635	635	196	825	865	611	0	524	521	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.6	0.0	13.4	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	9.3	12.0	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.3	8.3	1.7	1.7	1.7	1.0	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.1	26.1	37.5	8.2	8.2	13.1	0.0	15.0	12.0	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		978			478			256			6	
Approach Delay, s/veh		26.1			13.7			14.3			12.0	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.3	23.6		23.6	0.0	31.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.5	5.0	16.9		4.0	0.0	5.6				
Green Ext Time (p_c), s		0.8	0.0	2.3		0.0	0.0	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			20.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	715	270	363	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	715	270	363	388	0	80	0	67	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	753	284	382	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	811	306	421	1998	0	414	0	364	0	465	0
Arrive On Green	0.00	0.33	0.33	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2420	913	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	530	507	382	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1630	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.4	23.4	16.6	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.4	23.4	16.6	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	570	546	421	1998	0	414	0	364	0	465	0
V/C Ratio(X)	0.43	0.93	0.93	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	578	553	457	1998	0	414	0	364	0	465	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.9	25.0	25.1	28.7	8.0	0.0	23.6	0.0	23.1	0.0	22.0	0.0
Incr Delay (d2), s/veh	91.1	21.4	22.2	20.7	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	13.8	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.0	46.5	47.2	49.4	8.0	0.0	24.7	0.0	24.3	0.0	22.0	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1038			790			155			3	
Approach Delay, s/veh		46.9			28.0			24.5			22.0	
Approach LOS		D			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		24.0	23.4	30.6		24.0	4.6	49.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.2	18.6	25.4		2.1	2.0	6.4				
Green Ext Time (p_c), s		0.5	0.3	0.7		0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			37.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	467	628	11	78	677	264	34	284	150	222	257	506
Future Volume (veh/h)	467	628	11	78	677	264	34	284	150	222	257	506
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	486	654	11	81	705	0	35	296	156	231	268	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	550	283	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2242	1152	1757	1845	1568
Grp Volume(v), veh/h	486	325	340	81	705	0	35	230	222	231	268	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1641	1757	1845	1568
Q Serve(g_s), s	11.0	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.4	10.3	8.7	0.0
Cycle Q Clear(g_c), s	11.0	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.4	10.3	8.7	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.90	0.57	0.57	0.78	0.89	0.00	0.59	0.53	0.55	0.91	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	22.2	22.2	36.9	29.8	0.0	37.8	26.0	26.2	33.5	19.3	0.0
Incr Delay (d2), s/veh	17.7	1.3	1.2	16.8	11.6	0.0	8.9	4.7	5.4	33.4	1.9	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	6.5	6.1	6.3	2.2	8.7	0.0	0.9	4.9	4.9	7.4	4.7	0.0
LnGrp Delay(d),s/veh	50.6	23.5	23.4	53.7	41.4	0.0	46.8	30.7	31.5	66.8	21.1	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1151			786			487			499	
Approach Delay, s/veh		34.9			42.7			32.3			42.3	
Approach LOS		C			D			C			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	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	12.3	11.4	5.6	14.1	3.6	10.7	13.0	17.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			37.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	194	215	60	215	215	234	107	931	235	181	1074	217
Future Volume (veh/h)	194	215	60	215	215	234	107	931	235	181	1074	217
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		0.97	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	202	224	62	224	224	244	111	970	245	189	1119	226
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	696	303	269	390	327	141	1241	313	277	1567	479
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4035	1016	3442	5085	1553
Grp Volume(v), veh/h	202	224	62	224	224	244	111	815	400	189	1119	226
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1661	1721	1695	1553
Q Serve(g_s), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.0	3.6	13.3	8.0
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.0	3.6	13.3	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	246	696	303	269	390	327	141	1043	511	277	1567	479
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.57	0.75	0.78	0.78	0.78	0.68	0.71	0.47
Avail Cap(c_a), veh/h	312	933	407	325	505	423	169	1043	511	277	1567	479
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	28.6	23.5	23.0	28.1	24.2	25.3	30.8	21.5	21.6	30.5	20.9	19.1
Incr Delay (d2), s/veh	12.9	0.3	0.3	14.3	1.3	5.2	18.1	5.8	11.4	6.7	2.8	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	4.6	1.8	1.0	5.2	3.9	4.7	2.8	7.7	8.5	2.0	6.6	3.8
LnGrp Delay(d),s/veh	41.5	23.8	23.3	42.5	25.6	30.5	48.9	27.4	33.0	37.2	23.8	22.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		488			692			1326			1534	
Approach Delay, s/veh		31.0			32.8			30.9			25.2	
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	10.0	25.5	14.9	17.9	9.9	25.5	14.0	18.8				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	5.6	17.0	10.4	5.7	6.2	15.3	9.6	12.0				
Green Ext Time (p_c), s	0.0	2.7	0.1	1.2	0.0	3.2	0.1	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			29.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	611	81	160	494	168	138	880	184	297	835	202
Future Volume (veh/h)	216	611	81	160	494	168	138	880	184	297	835	202
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	220	623	83	163	504	171	141	898	188	303	852	206
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	802	107	194	573	193	215	1067	466	368	1410	339
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3134	417	1774	2595	876	3442	3539	1544	3442	4074	978
Grp Volume(v), veh/h	220	351	355	163	343	332	141	898	188	303	708	350
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1662
Q Serve(g_s), s	9.6	14.7	14.7	7.2	14.9	15.0	3.2	18.9	7.7	6.9	13.7	13.9
Cycle Q Clear(g_c), s	9.6	14.7	14.7	7.2	14.9	15.0	3.2	18.9	7.7	6.9	13.7	13.9
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	256	453	456	194	391	376	215	1067	466	368	1173	575
V/C Ratio(X)	0.86	0.78	0.78	0.84	0.88	0.88	0.66	0.84	0.40	0.82	0.60	0.61
Avail Cap(c_a), veh/h	256	463	466	194	400	385	238	1067	466	368	1173	575
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	33.2	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.5	21.6
Incr Delay (d2), s/veh	24.0	7.9	8.0	26.7	19.0	20.6	5.6	8.0	2.6	14.1	2.3	4.7
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	6.4	8.1	8.2	4.9	9.3	9.2	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	57.2	35.4	35.5	61.5	48.9	50.6	42.0	34.0	24.7	48.9	23.8	26.3
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		926			838			1227			1361	
Approach Delay, s/veh		40.6			52.0			33.5			30.0	
Approach LOS		D			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	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.7	5.2	15.9	11.6	17.0				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			37.5									
HCM 2010 LOS			D									

Appendix F

Casa Boronda
Driveway Counts

Casa Boronda Driveway Volumes
16/Apr
IDAX Data Solutions

Time	West Driveway		East Driveway	
	In's	Out's	In's	Out's
7:00	1	0	0	0
7:15	1	0	0	0
7:30	0	0	0	1
7:45	1	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	1	0	0	0
16:00	4	1	0	3
16:15	1	2	0	2
16:30	5	1	0	0
16:45	4	0	0	5
17:00	4	0	0	3
17:15	9	1	0	11
17:30	2	1	0	2
17:45	5	2	0	1
AM Total	4	0	0	1
PM Total	34	8	0	27
Total	38	8	0	28

Hourly Totals	Peak Hour IB	Peak Hour OB
-		
-		
-		
4 <--	3	1
3		
2		
1		
1		
-		
-		
-		
28		
27		
43 <--	22	21
42		
41		

Appendix G

Level of Service

Calculations

Existing Plus Project

Ag Housing

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Existing Plus Project Ag AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	804	1008	17	21	432
Future Volume (vph)	210	804	1008	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	282	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	231	884	1108	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	231	884	1127	0	23	301
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.0	18.0
Effective Green, g (s)	58.7	59.1	46.0		18.7	19.1
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	354	2442	1886		390	356
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.38					c0.19
v/c Ratio	0.65	0.36	0.60		0.06	0.85
Uniform Delay, d1	9.1	5.2	13.1		26.1	31.4
Progression Factor	1.84	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.0	0.1	0.6		0.0	16.5
Delay (s)	20.7	2.1	13.7		26.1	48.0
Level of Service	C	A	B		C	D
Approach Delay (s)		5.9	13.7		46.9	
Approach LOS		A	B		D	
Intersection Summary						
HCM 2000 Control Delay			16.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			84.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			61.8%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Future Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	953	0	0	1311	271	311	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	953	0	0	1582	0	155	157	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.0	18.0	18.0			
Effective Green, g (s)		59.1			46.0		18.7	18.7	18.7			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2405			1842		358	359	337			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.6		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.1			3.4		0.8	0.9	0.1			
Delay (s)		5.5			14.5		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.5			14.5			28.4			0.0	
Approach LOS		A			B			C			A	
Intersection Summary												
HCM 2000 Control Delay			13.9			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			84.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			55.4%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing Plus Project Ag AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	946	1220	0	210	361		
Future Volume (veh/h)	0	946	1220	0	210	361		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1040	1341	0	231	397		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1656	1688	0	1121	516		
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1040	1341	0	231	397		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	9.7	13.9	0.0	2.1	10.0		
Cycle Q Clear(g_c), s	0.0	9.7	13.9	0.0	2.1	10.0		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1656	1688	0	1121	516		
V/C Ratio(X)	0.00	0.63	0.79	0.00	0.21	0.77		
Avail Cap(c_a), veh/h	0	2451	2499	0	1651	759		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	8.2	9.3	0.0	10.2	12.8		
Incr Delay (d2), s/veh	0.0	0.1	0.6	0.0	0.1	2.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	4.5	6.7	0.0	1.0	4.5		
LnGrp Delay(d),s/veh	0.0	8.4	9.9	0.0	10.2	15.1		
LnGrp LOS		A	A		B	B		
Approach Vol, veh/h		1040	1341		628			
Approach Delay, s/veh		8.4	9.9		13.3			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.0		18.1		25.0		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		11.7		12.0		15.9		
Green Ext Time (p_c), s		3.1		1.5		4.0		
Intersection Summary								
HCM 2010 Ctrl Delay			10.1					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	846	441	294	23	280	809	178	282	29
Future Volume (veh/h)	29	284	9	846	441	294	23	280	809	178	282	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	910	474	0	25	301	870	191	303	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	464	15	1145	1546	815	54	632	1422	266	728	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3150	320
Grp Volume(v), veh/h	31	154	161	910	474	0	25	301	870	191	164	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Cycle Q Clear(g_c), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	235	245	1145	1546	815	54	632	1422	266	397	405
V/C Ratio(X)	0.52	0.66	0.66	0.79	0.31	0.00	0.47	0.48	0.61	0.72	0.41	0.42
Avail Cap(c_a), veh/h	132	827	861	1365	2861	1403	114	1320	1961	329	710	724
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	37.1	27.3	16.3	0.0	43.6	33.5	4.2	41.1	29.9	29.9
Incr Delay (d2), s/veh	2.6	6.5	6.3	3.8	0.2	0.0	2.3	0.6	0.4	8.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	11.0	3.9	0.0	0.7	3.4	3.2	2.7	3.6	3.7
LnGrp Delay(d),s/veh	46.0	43.6	43.4	31.1	16.5	0.0	45.9	34.1	4.6	49.9	30.6	30.6
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1384			1196			525	
Approach Delay, s/veh		43.7			26.1			12.9			37.6	
Approach LOS		D			C			B			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	37.0	18.5	8.8	27.1	8.8	46.7	13.3	22.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	24.3	10.1	3.3	9.5	3.7	10.0	7.1	9.1				
Green Ext Time (p_c), s	6.7	2.9	0.0	1.3	0.0	5.4	0.2	6.9				
Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing Plus Project Ag AM

Intersection

Int Delay, s/veh 18.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	954	19
Future Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	954	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1061	13	129	1026	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	388	407	346	140	21	142	190	1701	21	160	1111	495
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5128	63	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	695	379	129	1026	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	388	407	346	161	0	142	190	1114	608	160	1111	495
V/C Ratio(X)	0.09	0.09	0.96	0.47	0.00	0.69	0.93	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	388	407	346	478	0	423	190	1114	608	211	1148	512
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	28.2	35.3	39.2	0.0	40.7	40.9	26.0	26.0	41.2	30.6	22.0
Incr Delay (d2), s/veh	0.1	0.1	38.6	2.1	0.0	5.8	44.8	1.1	2.0	15.3	12.0	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	0.7	0.7	12.1	1.9	0.0	2.7	6.8	7.6	8.5	3.9	14.5	0.4
LnGrp Delay(d),s/veh	28.3	28.3	74.0	41.3	0.0	46.5	85.6	27.1	28.0	56.5	42.7	22.1
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1250			1175	
Approach Delay, s/veh		66.1			44.3			35.6			43.8	
Approach LOS		E			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	35.0		14.4	14.4	36.7				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		22.0	11.2	27.9		7.6	8.6	18.1				
Green Ext Time (p_c), s		0.0	0.0	1.1		0.6	0.1	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			43.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	595	1	130	4	918	486	206	1160	1
Future Volume (veh/h)	0	0	2	595	1	130	4	918	486	206	1160	1
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	2	633	1	138	4	977	517	219	1234	1
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	3	0	85	731	600	510	8	1372	614	202	1790	1
Arrive On Green	0.00	0.00	0.05	0.21	0.33	0.33	0.00	0.39	0.39	0.11	0.50	0.50
Sat Flow, veh/h	1774	0	1583	3408	1845	1568	1774	3539	1583	1757	3594	3
Grp Volume(v), veh/h	0	0	2	633	1	138	4	977	517	219	602	633
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1704	1845	1568	1774	1770	1583	1757	1752	1844
Q Serve(g_s), s	0.0	0.0	0.1	12.5	0.0	4.5	0.2	16.3	20.7	8.0	18.3	18.3
Cycle Q Clear(g_c), s	0.0	0.0	0.1	12.5	0.0	4.5	0.2	16.3	20.7	8.0	18.3	18.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	0	85	731	600	510	8	1372	614	202	873	919
V/C Ratio(X)	0.00	0.00	0.02	0.87	0.00	0.27	0.53	0.71	0.84	1.09	0.69	0.69
Avail Cap(c_a), veh/h	102	0	91	783	600	510	102	1372	614	202	873	919
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)	0.00	0.00	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	0.0	0.0	31.2	26.4	15.9	17.4	34.6	18.1	19.4	30.8	13.4	13.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	9.6	0.0	0.3	46.8	3.2	13.2	88.0	4.4	4.2
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	0.0	0.0	0.0	6.9	0.0	2.0	0.2	8.5	11.3	8.7	9.8	10.2
LnGrp Delay(d),s/veh	0.0	0.0	31.3	36.1	15.9	17.7	81.5	21.2	32.6	118.9	17.8	17.6
LnGrp LOS			C	D	B	B	F	C	C	F	B	B
Approach Vol, veh/h		2			772			1498			1454	
Approach Delay, s/veh		31.3			32.7			25.3			32.9	
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	12.0	31.0	18.9	7.7	4.3	38.7	0.0	26.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	10.0	22.7	14.5	2.1	2.2	20.3	0.0	6.5				
Green Ext Time (p_c), s	0.0	3.0	0.4	0.0	0.0	5.7	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			29.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	316	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	316	97	113	591	56	135	1145	224
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	363	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	363	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	7.0	0.0	37.0	0.3	0.1	8.5	11.9	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	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.5	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			526			873			1471	
Approach Delay, s/veh		64.8			48.6			30.0			38.8	
Approach LOS		E			D			C			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	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			44.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	452	142	98	344	3	155	0	174	7	2	0
Future Volume (veh/h)	0	452	142	98	344	3	155	0	174	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	551	173	120	420	4	189	0	212	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	720	225	151	1514	14	680	0	576	424	82	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2579	807	1630	3301	31	1471	0	1568	810	224	0
Grp Volume(v), veh/h	0	367	357	120	207	217	189	0	212	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1471	0	1568	1034	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	3.9	0.0	5.1	4.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	466	151	746	783	680	0	576	506	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.28	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	783	680	0	576	506	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.6	0.0	12.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	4.9	9.2	0.2	0.2	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.9	2.0	2.1	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.6	22.0	32.2	8.9	8.9	12.6	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		724			544			401			11	
Approach Delay, s/veh		21.8			14.0			13.2			10.6	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.3	18.9		23.5	0.0	28.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		7.1	5.7	12.2		6.0	0.0	6.1				
Green Ext Time (p_c), s		1.4	0.1	2.3		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			17.2									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	113	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	143	233	1400	11	596	5	508	315	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2920	517	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	375	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.1	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.1	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	475	475	233	688	722	601	0	508	600	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	565	306	699	734	601	0	508	600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.5	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.1	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.7	24.5	24.7	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		751			590			237			2	
Approach Delay, s/veh		24.7			18.4			13.9			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.2	8.0	13.1		4.6	2.0	6.3				
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			20.7									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	647	29	129	553	237	40	259	70	174	359	580
Future Volume (veh/h)	502	647	29	129	553	237	40	259	70	174	359	580
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	518	667	30	133	570	0	41	267	72	179	370	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	611	983	44	167	706	316	67	691	183	217	627	533
Arrive On Green	0.18	0.29	0.29	0.10	0.20	0.00	0.04	0.25	0.25	0.12	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2717	719	1757	1845	1568
Grp Volume(v), veh/h	518	342	355	133	570	0	41	169	170	179	370	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	10.9	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Cycle Q Clear(g_c), s	10.9	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	611	504	523	167	706	316	67	441	432	217	627	533
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.61	0.38	0.39	0.82	0.59	0.00
Avail Cap(c_a), veh/h	668	545	565	221	836	374	116	441	432	247	627	533
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	23.7	23.7	33.1	28.4	0.0	35.4	23.0	23.1	31.9	20.4	0.0
Incr Delay (d2), s/veh	9.4	3.1	3.0	13.8	5.0	0.0	8.8	2.5	2.7	17.9	4.0	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	6.0	6.7	6.9	3.3	6.1	0.0	1.0	3.2	3.2	4.7	7.0	0.0
LnGrp Delay(d),s/veh	39.1	26.7	26.6	46.9	33.4	0.0	44.2	25.5	25.8	49.8	24.4	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1215			703			380			549	
Approach Delay, s/veh		32.0			35.9			27.6			32.7	
Approach LOS		C			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	13.7	23.5	11.7	25.8	7.4	29.9	17.8	19.7				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	9.4	8.2	7.6	14.8	3.7	14.4	12.9	13.7				
Green Ext Time (p_c), s	0.1	1.4	0.1	2.7	0.0	1.6	0.4	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			32.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
12: N Main St & W Alvin Dr/E Alvin Dr

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Future Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
Arrive On Green	0.09	0.21	0.21	0.21	0.34	0.34	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	830	317	405	626	527	136	839	388	336	1555	479
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	27.1	25.8	29.5	20.7	20.8	36.5	25.2	28.9	33.9	21.0	19.7
Incr Delay (d2), s/veh	8.4	0.9	0.8	20.1	0.9	1.3	8.4	2.7	52.6	8.3	0.8	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	2.9	4.2	2.1	8.9	6.0	5.3	0.9	4.6	13.7	2.8	3.5	1.6
LnGrp Delay(d),s/veh	42.6	27.9	26.7	49.5	21.6	22.2	44.8	27.8	81.5	42.2	21.8	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		674			964			902			953	
Approach Delay, s/veh		30.4			31.4			52.2			26.8	
Approach LOS		C			C			D			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	11.7	23.5	20.6	20.9	7.2	28.0	11.3	30.3				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.2	13.8				
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.3									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Existing Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Future Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	197	437	107	148	615	99	80	548	126	216	827	178
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	238	768	186	186	741	119	195	976	432	277	1267	271
Arrive On Green	0.13	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2820	685	1774	3051	490	3408	3505	1551	3442	4195	897
Grp Volume(v), veh/h	197	273	271	148	356	358	80	548	126	216	667	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Cycle Q Clear(g_c), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	238	482	472	186	430	430	195	976	432	277	1024	514
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.65	0.66
Avail Cap(c_a), veh/h	247	482	473	231	467	467	250	976	432	277	1024	514
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(l)	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	28.8	21.4	21.4	29.8	24.5	24.5	31.0	21.0	19.3	30.8	20.7	20.7
Incr Delay (d2), s/veh	19.7	1.5	1.7	14.3	11.2	11.4	1.4	2.3	1.7	13.1	3.2	6.5
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	4.9	4.6	4.6	3.4	7.7	7.7	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	48.4	22.9	23.1	44.1	35.7	35.9	32.4	23.4	21.0	43.9	23.9	27.2
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		741			862			754			1221	
Approach Delay, s/veh		29.8			37.2			23.9			28.4	
Approach LOS		C			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	10.0	23.5	11.6	23.1	8.4	25.1	13.7	21.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+l1), s	6.2	11.1	7.6	11.2	3.5	13.8	9.4	15.1				
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			29.9									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

Existing Plus Project Ag PM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	443	1346	882	30	37	310
Future Volume (vph)	443	1346	882	30	37	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.18	1.00	1.00		0.95	1.00
Satd. Flow (perm)	323	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	447	1360	891	30	37	313
RTOR Reduction (vph)	0	0	0	0	0	238
Lane Group Flow (vph)	447	1360	921	0	37	75
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.5	58.5	37.4		19.6	19.6
Effective Green, g (s)	59.2	59.6	38.5		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	502	2403	1536		413	377
v/s Ratio Prot	c0.18	0.39	0.27		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.89	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.2	7.0	18.4		26.1	26.5
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	13.9	0.3	0.7		0.1	0.2
Delay (s)	32.7	4.2	19.1		26.1	26.7
Level of Service	C	A	B		C	C
Approach Delay (s)		11.3	19.1		26.6	
Approach LOS		B	B		C	
Intersection Summary						
HCM 2000 Control Delay			15.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			86.9		Sum of lost time (s)	11.6
Intersection Capacity Utilization			65.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1432	0	0	963	229	420	3	357	0	0	0
Future Volume (vph)	0	1432	0	0	963	229	420	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1523	0	0	1024	244	447	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1523	0	0	1268	0	223	227	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.5			37.4		19.6	19.6	19.6			
Effective Green, g (s)		59.6			38.5		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2390			1491		386	388	364			
v/s Ratio Prot		c0.44			c0.38		0.13	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.58	0.59	0.89			
Uniform Delay, d1		7.6			21.6		29.5	29.6	32.2			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.4		2.1	2.2	21.8			
Delay (s)		8.3			14.0		31.6	31.8	54.0			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.3			14.0			41.9			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			18.0			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			86.9			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			68.4%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing Plus Project Ag PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1437	1246	0	388	365		
Future Volume (veh/h)	0	1437	1246	0	388	365		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1497	1298	0	404	380		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1818	1818	0	1066	491		
Arrive On Green	0.00	0.52	0.52	0.00	0.31	0.31		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1497	1298	0	404	380		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	16.9	13.3	0.0	4.4	10.4		
Cycle Q Clear(g_c), s	0.0	16.9	13.3	0.0	4.4	10.4		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1818	1818	0	1066	491		
V/C Ratio(X)	0.00	0.82	0.71	0.00	0.38	0.77		
Avail Cap(c_a), veh/h	0	2515	2515	0	1327	611		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.4	8.6	0.0	12.5	14.6		
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	0.2	4.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.2	6.4	0.0	2.0	5.0		
LnGrp Delay(d),s/veh	0.0	10.6	8.8	0.0	12.7	19.0		
LnGrp LOS		B	A		B	B		
Approach Vol, veh/h		1497	1298		784			
Approach Delay, s/veh		10.6	8.8		15.8			
Approach LOS		B	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.6		18.4		28.6		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		18.9		12.4		15.3		
Green Ext Time (p_c), s		4.6		1.4		4.1		
Intersection Summary								
HCM 2010 Ctrl Delay			11.1					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	736	348	527	12	498	1055	529	492	31
Future Volume (veh/h)	28	327	7	736	348	527	12	498	1055	529	492	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	767	362	0	12	519	1099	551	512	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	53	504	10	771	1201	810	29	840	1292	599	1337	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3350	209
Grp Volume(v), veh/h	29	170	178	767	362	0	12	519	1099	551	267	277
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.8	10.9	25.8	8.7	0.0	0.8	15.0	17.2	18.1	12.3	12.3
Cycle Q Clear(g_c), s	1.9	10.8	10.9	25.8	8.7	0.0	0.8	15.0	17.2	18.1	12.3	12.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	53	251	263	771	1201	810	29	840	1292	599	699	721
V/C Ratio(X)	0.54	0.68	0.68	0.99	0.30	0.00	0.41	0.62	0.85	0.92	0.38	0.38
Avail Cap(c_a), veh/h	104	689	720	771	1998	1167	93	1048	1456	599	739	763
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	45.8	45.8	43.8	27.1	0.0	55.4	38.6	8.6	46.1	24.2	24.2
Incr Delay (d2), s/veh	3.1	6.6	6.4	30.9	0.3	0.0	3.4	0.7	4.6	20.1	0.3	0.3
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	0.9	5.5	5.8	15.2	4.2	0.0	0.4	7.4	7.2	10.2	6.0	6.2
LnGrp Delay(d),s/veh	57.4	52.4	52.2	74.7	27.4	0.0	58.8	39.3	13.2	66.2	24.6	24.5
LnGrp LOS	E	D	D	E	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1129			1630			1095	
Approach Delay, s/veh		52.7			59.6			21.8			45.5	
Approach LOS		D			E			C			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	32.0	22.5	7.9	51.4	9.1	45.4	26.0	33.3				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	27.8	12.9	2.8	14.3	3.9	10.7	20.1	19.2				
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7				
Intersection Summary												
HCM 2010 Ctrl Delay			40.8									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing Plus Project Ag PM

Intersection

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			2.7			21.9			26.5		
HCM LOS							C			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

HCM 2010 Signalized Intersection Summary
6: N Davis Rd & Post Dr/Commercial Dwy

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	107	11	174	203	1301	17	210	945	40
Future Volume (veh/h)	90	29	211	107	11	174	203	1301	17	210	945	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	108	11	176	205	1314	17	212	955	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	305	257	237	24	230	239	1499	19	245	1038	461
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.29	0.29
Sat Flow, veh/h	1757	1845	1554	1617	165	1570	1774	5174	67	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	119	0	176	205	861	470	212	955	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.1	12.2	5.6	0.0	9.9	10.4	22.3	22.3	10.8	24.1	1.7
Cycle Q Clear(g_c), s	2.7	3.1	12.2	5.6	0.0	9.9	10.4	22.3	22.3	10.8	24.1	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	291	305	257	261	0	230	239	982	536	245	1038	461
V/C Ratio(X)	0.21	0.24	0.83	0.46	0.00	0.76	0.86	0.88	0.88	0.86	0.92	0.09
Avail Cap(c_a), veh/h	380	399	336	482	0	425	250	1028	561	250	1073	477
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	33.5	37.3	35.4	0.0	37.9	39.1	31.2	31.2	39.0	31.6	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.3	1.2	0.0	5.2	24.0	8.4	14.2	25.3	12.3	0.1
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	1.3	1.6	6.2	2.8	0.0	4.6	6.7	11.6	13.5	7.0	13.6	0.7
LnGrp Delay(d),s/veh	33.6	33.9	49.6	36.6	0.0	43.1	63.1	39.7	45.4	64.3	43.9	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			295			1536			1207	
Approach Delay, s/veh		43.5			40.5			44.6			46.8	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.3	18.4	33.1		19.6	18.8	32.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		14.2	12.4	26.1		11.9	12.8	24.3				
Green Ext Time (p_c), s		0.7	0.0	1.0		1.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			44.9									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 				 			 	
Traffic Volume (veh/h)	12	6	24	428	7	225	23	1282	678	144	1012	14
Future Volume (veh/h)	12	6	24	428	7	225	23	1282	678	144	1012	14
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	13	7	26	470	8	247	25	1409	745	158	1112	15
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	21	78	572	398	339	40	1556	696	161	1818	25
Arrive On Green	0.01	0.06	0.06	0.17	0.21	0.21	0.02	0.44	0.44	0.09	0.51	0.51
Sat Flow, veh/h	1774	347	1288	3442	1863	1583	1774	3539	1583	1774	3576	48
Grp Volume(v), veh/h	13	0	33	470	8	247	25	1409	745	158	550	577
Grp Sat Flow(s),veh/h/ln	1774	0	1635	1721	1863	1583	1774	1770	1583	1774	1770	1854
Q Serve(g_s), s	0.5	0.0	1.3	8.7	0.2	9.6	0.9	24.4	29.0	5.9	14.6	14.6
Cycle Q Clear(g_c), s	0.5	0.0	1.3	8.7	0.2	9.6	0.9	24.4	29.0	5.9	14.6	14.6
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	23	0	99	572	398	339	40	1556	696	161	900	943
V/C Ratio(X)	0.57	0.00	0.33	0.82	0.02	0.73	0.63	0.91	1.07	0.98	0.61	0.61
Avail Cap(c_a), veh/h	108	0	198	626	452	384	108	1556	696	161	900	943
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	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	32.4	0.0	29.7	26.5	20.5	24.1	32.0	17.2	18.5	29.9	11.6	11.6
Incr Delay (d2), s/veh	20.5	0.0	2.0	8.0	0.0	6.0	15.5	9.1	54.4	64.4	3.1	3.0
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	0.4	0.0	0.6	4.7	0.1	4.7	0.6	13.7	23.1	5.7	7.8	8.1
LnGrp Delay(d),s/veh	52.8	0.0	31.7	34.5	20.5	30.2	47.4	26.3	72.9	94.3	14.7	14.5
LnGrp LOS	D		C	C	C	C	D	C	F	F	B	B
Approach Vol, veh/h		46			725			2179			1285	
Approach Delay, s/veh		37.7			32.9			42.5			24.4	
Approach LOS		D			C			D			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	10.0	33.0	15.0	8.0	5.5	37.5	4.8	18.1				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	7.9	31.0	10.7	3.3	2.9	16.6	2.5	11.6				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.0	0.0	6.2	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			35.3									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	227	340	128	130	290	236	168	1230	131	177	791	157
Future Volume (veh/h)	227	340	128	130	290	236	168	1230	131	177	791	157
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	354	133	135	302	0	175	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	210	1370	600	208	1367	612
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	354	133	135	302	0	175	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.7	6.7	13.6	0.0	8.6	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.7	6.7	13.6	0.0	8.6	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	210	1370	600	208	1367	612
V/C Ratio(X)	0.85	0.92	0.42	0.86	0.76	0.00	0.84	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1367	612
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	33.0	0.0	38.6	26.4	18.4	38.9	22.0	0.0
Incr Delay (d2), s/veh	21.9	26.9	0.9	35.9	8.1	0.0	19.6	11.8	0.2	33.2	0.8	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	3.7	11.4	2.9	4.9	7.9	0.0	5.4	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	61.8	31.7	76.2	41.0	0.0	58.2	38.2	18.6	72.1	22.7	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		723			437			1592			1008	
Approach Delay, s/veh		56.5			51.9			38.7			31.8	
Approach LOS		E			D			D			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	15.0	39.2	12.4	23.0	15.1	39.1	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.6	18.7	8.1	15.6				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			41.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	819	145	89	375	4	92	2	165	5	0	1
Future Volume (veh/h)	0	819	145	89	375	4	92	2	165	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	836	148	91	383	4	94	2	168	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	990	175	114	1675	17	599	11	524	439	11	66
Arrive On Green	0.00	0.35	0.35	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2866	507	1675	3389	35	1370	33	1524	931	32	192
Grp Volume(v), veh/h	0	492	492	91	189	198	96	0	168	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1404	0	1524	1155	0	0
Q Serve(g_s), s	0.0	15.0	15.0	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	3.0	3.6	3.6	2.2	0.0	4.5	2.2	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	583	582	114	826	866	611	0	524	516	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.23	0.23	0.16	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	635	634	196	826	866	611	0	524	516	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.7	0.0	13.4	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	9.6	12.1	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.4	1.7	1.7	1.7	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	37.6	8.1	8.1	13.2	0.0	15.1	12.1	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		984			478			264			6	
Approach Delay, s/veh		26.4			13.7			14.4			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.3	23.7		23.6	0.0	32.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.5	5.0	17.0		4.2	0.0	5.6				
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			21.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	276	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	276	364	388	0	80	0	67	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	291	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	807	311	422	2002	0	413	0	363	0	464	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2403	927	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	534	511	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.8	23.8	16.7	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.8	23.8	16.7	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	572	546	422	2002	0	413	0	363	0	464	0
V/C Ratio(X)	0.43	0.93	0.94	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	577	551	456	2002	0	413	0	363	0	464	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	25.2	25.2	28.8	7.9	0.0	23.7	0.0	23.2	0.0	22.1	0.0
Incr Delay (d2), s/veh	91.1	22.5	23.4	20.9	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.7	14.2	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.1	47.7	48.5	49.7	8.0	0.0	24.8	0.0	24.4	0.0	22.1	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1046			791			155			3	
Approach Delay, s/veh		48.2			28.2			24.6			22.1	
Approach LOS		D			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		24.0	23.5	30.8		24.0	4.6	49.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.2	18.7	25.8		2.1	2.0	6.4				
Green Ext Time (p_c), s		0.5	0.3	0.5		0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			38.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	628	11	78	677	269	34	289	150	226	261	513
Future Volume (veh/h)	473	628	11	78	677	269	34	289	150	226	261	513
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	493	654	11	81	705	0	35	301	156	235	272	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	553	280	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2255	1141	1757	1845	1568
Grp Volume(v), veh/h	493	325	340	81	705	0	35	232	225	235	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1643	1757	1845	1568
Q Serve(g_s), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.2	9.5	10.5	8.9	0.0
Cycle Q Clear(g_c), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.2	9.5	10.5	8.9	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.69	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.91	0.57	0.57	0.78	0.89	0.00	0.59	0.54	0.56	0.92	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	22.2	22.2	36.9	29.8	0.0	37.8	26.1	26.2	33.6	19.3	0.0
Incr Delay (d2), s/veh	19.6	1.3	1.2	16.8	11.6	0.0	8.9	4.8	5.5	36.7	1.9	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	6.8	6.1	6.3	2.2	8.7	0.0	0.9	5.0	4.9	7.7	4.8	0.0
LnGrp Delay(d),s/veh	52.6	23.5	23.4	53.7	41.4	0.0	46.8	30.9	31.7	70.3	21.2	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1158			786			492			507	
Approach Delay, s/veh		35.9			42.7			32.4			44.0	
Approach LOS		D			D			C			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	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	12.5	11.5	5.6	14.1	3.6	10.9	13.2	17.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
12: N Main St & W Alvin Dr/E Alvin Dr

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	215	60	216	215	234	107	932	236	181	1075	218
Future Volume (veh/h)	195	215	60	216	215	234	107	932	236	181	1075	218
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		0.97	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	224	62	225	224	244	111	971	246	189	1120	227
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	696	303	270	390	327	141	1239	313	277	1566	478
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4032	1019	3442	5085	1552
Grp Volume(v), veh/h	203	224	62	225	224	244	111	816	401	189	1120	227
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1660	1721	1695	1552
Q Serve(g_s), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	247	696	303	270	390	327	141	1042	510	277	1566	478
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.57	0.75	0.78	0.78	0.79	0.68	0.72	0.47
Avail Cap(c_a), veh/h	312	932	406	324	504	422	169	1042	510	277	1566	478
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	28.6	23.5	23.0	28.1	24.3	25.3	30.9	21.6	21.6	30.6	21.0	19.2
Incr Delay (d2), s/veh	13.0	0.3	0.3	14.5	1.3	5.2	18.1	5.9	11.6	6.7	2.8	3.4
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	4.6	1.8	1.0	5.2	3.9	4.7	2.8	7.9	8.5	2.0	6.6	3.9
LnGrp Delay(d),s/veh	41.6	23.8	23.3	42.6	25.6	30.5	49.0	27.5	33.2	37.3	23.8	22.5
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		489			693			1328			1536	
Approach Delay, s/veh		31.1			32.9			31.0			25.3	
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	10.0	25.5	14.9	17.9	10.0	25.5	14.0	18.8				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	5.7	17.1	10.4	5.7	6.2	15.4	9.6	12.0				
Green Ext Time (p_c), s	0.0	2.6	0.1	1.2	0.0	3.2	0.1	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			29.2									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Existing Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	613	81	160	496	168	138	880	184	297	835	204
Future Volume (veh/h)	217	613	81	160	496	168	138	880	184	297	835	204
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	221	626	83	163	506	171	141	898	188	303	852	208
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	804	106	194	574	193	215	1067	466	368	1406	341
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3136	415	1774	2598	873	3442	3539	1544	3442	4065	986
Grp Volume(v), veh/h	221	353	356	163	344	333	141	898	188	303	710	350
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1702	1721	1770	1544	1721	1695	1661
Q Serve(g_s), s	9.7	14.7	14.8	7.2	14.9	15.1	3.2	18.9	7.7	6.9	13.8	13.9
Cycle Q Clear(g_c), s	9.7	14.7	14.8	7.2	14.9	15.1	3.2	18.9	7.7	6.9	13.8	13.9
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	256	453	457	194	391	376	215	1067	466	368	1173	574
V/C Ratio(X)	0.86	0.78	0.78	0.84	0.88	0.89	0.66	0.84	0.40	0.82	0.61	0.61
Avail Cap(c_a), veh/h	256	462	466	194	400	385	238	1067	466	368	1173	574
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	33.3	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.5	21.6
Incr Delay (d2), s/veh	24.7	8.1	8.2	26.7	19.2	20.9	5.6	8.0	2.6	14.1	2.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.2	8.3	4.9	9.3	9.2	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	57.9	35.6	35.7	61.5	49.2	50.9	42.1	34.1	24.7	49.0	23.9	26.4
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		930			840			1227			1363	
Approach Delay, s/veh		40.9			52.3			33.5			30.1	
Approach LOS		D			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	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.8	5.2	15.9	11.7	17.1				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			37.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	6.8	0.0	37.0	0.3	0.1	8.5	11.9	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	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.4	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			525			873			1471	
Approach Delay, s/veh		64.8			48.5			30.0			38.8	
Approach LOS		E			D			C			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	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			44.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Ag AM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	113	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	143	233	1400	11	596	5	508	315	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2920	517	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	375	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.1	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.1	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	475	475	233	688	722	601	0	508	600	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	565	306	699	734	601	0	508	600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.5	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.1	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.7	24.5	24.7	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		751			590			237			2	
Approach Delay, s/veh		24.7			18.4			13.9			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+l1), s		5.2	8.0	13.1		4.6	2.0	6.3				
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			20.7									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	341	126	130	286	236	166	1230	131	177	791	157
Future Volume (veh/h)	227	341	126	130	286	236	166	1230	131	177	791	157
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	355	131	135	298	0	173	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	355	131	135	298	0	173	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.6	6.7	13.4	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.6	6.7	13.4	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
V/C Ratio(X)	0.85	0.92	0.41	0.86	0.75	0.00	0.83	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1371	613
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	32.9	0.0	38.7	26.4	18.4	38.9	21.9	0.0
Incr Delay (d2), s/veh	21.9	27.4	0.8	35.9	7.5	0.0	19.2	11.8	0.2	33.2	0.7	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	3.7	11.5	2.9	4.9	7.7	0.0	5.3	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	62.3	31.6	76.2	40.4	0.0	57.9	38.2	18.6	72.1	22.6	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		722			433			1590			1008	
Approach Delay, s/veh		56.8			51.6			38.7			31.7	
Approach LOS		E			D			D			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	15.0	39.2	12.4	23.0	15.0	39.2	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.5	18.7	8.1	15.4				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			41.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Ag PM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	715	271	363	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	715	271	363	388	0	80	0	67	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	753	285	382	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	810	307	421	1999	0	414	0	363	0	465	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2418	915	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	530	508	382	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1629	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.5	23.5	16.6	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.5	23.5	16.6	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	571	546	421	1999	0	414	0	363	0	465	0
V/C Ratio(X)	0.43	0.93	0.93	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	578	553	457	1999	0	414	0	363	0	465	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.9	25.1	25.1	28.7	8.0	0.0	23.6	0.0	23.1	0.0	22.0	0.0
Incr Delay (d2), s/veh	91.1	21.5	22.3	20.7	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	13.8	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.0	46.6	47.4	49.4	8.0	0.0	24.7	0.0	24.3	0.0	22.0	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1039			790			155			3	
Approach Delay, s/veh		47.0			28.0			24.5			22.0	
Approach LOS		D			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		24.0	23.4	30.7		24.0	4.6	49.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.2	18.6	25.5		2.1	2.0	6.4				
Green Ext Time (p_c), s		0.5	0.3	0.7		0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			37.7									
HCM 2010 LOS			D									

Appendix H

Level of Service

Calculations

Existing Plus Project

Apartments

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Existing Plus Project Apts AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	213	812	1011	17	21	432
Future Volume (vph)	213	812	1011	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	280	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	234	892	1111	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	173
Lane Group Flow (vph)	234	892	1130	0	23	302
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.1	18.1
Effective Green, g (s)	58.7	59.1	46.0		18.8	19.2
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	353	2439	1883		391	357
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.39					c0.19
v/c Ratio	0.66	0.37	0.60		0.06	0.85
Uniform Delay, d1	9.2	5.3	13.2		26.1	31.4
Progression Factor	1.86	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.4	0.1	0.6		0.0	16.5
Delay (s)	21.5	2.1	13.8		26.1	47.9
Level of Service	C	A	B		C	D
Approach Delay (s)		6.1	13.8		46.9	
Approach LOS		A	B		D	
Intersection Summary						
HCM 2000 Control Delay			16.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			84.9		Sum of lost time (s)	11.6
Intersection Capacity Utilization			61.9%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	878	0	0	1198	247	285	1	147	0	0	0
Future Volume (vph)	0	878	0	0	1198	247	285	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	965	0	0	1316	271	313	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	965	0	0	1587	0	156	158	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.1	18.1	18.1			
Effective Green, g (s)		59.1			46.0		18.8	18.8	18.8			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2402			1840		359	360	338			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.7		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.2			3.5		0.8	0.9	0.1			
Delay (s)		5.6			14.8		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.6			14.8			28.4			0.0	
Approach LOS		A			B			C			A	
Intersection Summary												
HCM 2000 Control Delay			14.0			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			84.9			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			55.6%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing Plus Project Apts AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	967	1225	0	210	363		
Future Volume (veh/h)	0	967	1225	0	210	363		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1063	1346	0	231	399		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1658	1690	0	1123	516		
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1063	1346	0	231	399		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	10.1	14.1	0.0	2.1	10.1		
Cycle Q Clear(g_c), s	0.0	10.1	14.1	0.0	2.1	10.1		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1658	1690	0	1123	516		
V/C Ratio(X)	0.00	0.64	0.80	0.00	0.21	0.77		
Avail Cap(c_a), veh/h	0	2435	2483	0	1640	755		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	8.4	9.4	0.0	10.2	12.9		
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	0.1	2.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	4.8	6.7	0.0	1.0	4.6		
LnGrp Delay(d),s/veh	0.0	8.5	10.0	0.0	10.3	15.3		
LnGrp LOS		A	B		B	B		
Approach Vol, veh/h		1063	1346		630			
Approach Delay, s/veh		8.5	10.0		13.5			
Approach LOS		A	B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.1		18.2		25.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		12.1		12.1		16.1		
Green Ext Time (p_c), s		3.2		1.5		4.0		
Intersection Summary								
HCM 2010 Ctrl Delay			10.2					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	853	441	294	23	284	837	178	283	29
Future Volume (veh/h)	29	284	9	853	441	294	23	284	837	178	283	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	917	474	0	25	305	900	191	304	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	463	15	1146	1546	815	54	641	1430	266	736	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3151	319
Grp Volume(v), veh/h	31	154	161	917	474	0	25	305	900	191	165	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.1	8.2	22.7	8.1	0.0	1.3	7.3	6.6	5.1	7.5	7.6
Cycle Q Clear(g_c), s	1.7	8.1	8.2	22.7	8.1	0.0	1.3	7.3	6.6	5.1	7.5	7.6
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	234	244	1146	1546	815	54	641	1430	266	401	409
V/C Ratio(X)	0.52	0.66	0.66	0.80	0.31	0.00	0.47	0.48	0.63	0.72	0.41	0.42
Avail Cap(c_a), veh/h	131	819	853	1353	2835	1392	113	1308	1953	326	704	718
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	37.5	37.5	27.6	16.4	0.0	44.0	33.6	4.2	41.5	30.0	30.0
Incr Delay (d2), s/veh	2.7	6.5	6.4	3.9	0.2	0.0	2.3	0.5	0.5	9.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	11.2	3.9	0.0	0.7	3.5	3.3	2.7	3.6	3.8
LnGrp Delay(d),s/veh	46.4	44.0	43.9	31.6	16.7	0.0	46.3	34.2	4.7	50.5	30.7	30.6
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1391			1230			526	
Approach Delay, s/veh		44.2			26.5			12.8			37.8	
Approach LOS		D			C			B			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	37.3	18.6	8.8	27.5	8.8	47.1	13.3	23.0				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	24.7	10.2	3.3	9.6	3.7	10.1	7.1	9.3				
Green Ext Time (p_c), s	6.6	2.9	0.0	1.3	0.0	5.4	0.2	7.1				
Intersection Summary												
HCM 2010 Ctrl Delay			25.1									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing Plus Project Apts AM

Intersection

Int Delay, s/veh 18.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	1019	14	120	962	19
Future Volume (veh/h)	34	28	310	60	9	91	164	1019	14	120	962	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1096	15	129	1034	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	387	406	345	140	21	142	190	1703	23	160	1115	497
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5119	70	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	719	392	129	1034	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1832	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.1	3.7	0.0	5.6	9.2	16.8	16.8	6.6	26.2	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.1	3.7	0.0	5.6	9.2	16.8	16.8	6.6	26.2	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	387	406	345	161	0	142	190	1117	609	160	1115	497
V/C Ratio(X)	0.09	0.09	0.97	0.47	0.00	0.69	0.93	0.64	0.64	0.80	0.93	0.04
Avail Cap(c_a), veh/h	387	406	345	477	0	422	190	1117	609	211	1146	511
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	28.2	35.4	39.3	0.0	40.8	41.0	26.2	26.2	41.3	30.7	22.0
Incr Delay (d2), s/veh	0.1	0.1	39.1	2.1	0.0	5.8	45.2	1.3	2.3	15.4	12.6	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	0.7	0.7	12.1	1.9	0.0	2.7	6.8	8.0	8.9	3.9	14.7	0.4
LnGrp Delay(d),s/veh	28.3	28.3	74.6	41.4	0.0	46.6	86.2	27.5	28.6	56.7	43.3	22.0
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1287			1183	
Approach Delay, s/veh		66.6			44.4			35.9			44.4	
Approach LOS		E			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	35.2		14.4	14.4	36.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		22.1	11.2	28.2		7.6	8.6	18.8				
Green Ext Time (p_c), s		0.0	0.0	1.0		0.6	0.1	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			43.7									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1	26	595	3	130	8	918	486	206	1160	10
Future Volume (veh/h)	34	1	26	595	3	130	8	918	486	206	1160	10
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	36	1	28	633	3	138	9	977	517	219	1234	11
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	51	3	86	730	446	379	16	1367	612	201	1750	16
Arrive On Green	0.03	0.06	0.06	0.21	0.24	0.24	0.01	0.39	0.39	0.11	0.49	0.49
Sat Flow, veh/h	1774	55	1537	3408	1845	1568	1774	3539	1583	1757	3560	32
Grp Volume(v), veh/h	36	0	29	633	3	138	9	977	517	219	607	638
Grp Sat Flow(s),veh/h/ln	1774	0	1592	1704	1845	1568	1774	1770	1583	1757	1752	1839
Q Serve(g_s), s	1.4	0.0	1.2	12.5	0.1	5.1	0.4	16.4	20.8	8.0	18.8	18.9
Cycle Q Clear(g_c), s	1.4	0.0	1.2	12.5	0.1	5.1	0.4	16.4	20.8	8.0	18.8	18.9
Prop In Lane	1.00		0.97	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	51	0	89	730	446	379	16	1367	612	201	861	904
V/C Ratio(X)	0.71	0.00	0.32	0.87	0.01	0.36	0.55	0.71	0.85	1.09	0.71	0.71
Avail Cap(c_a), veh/h	102	0	91	780	446	379	102	1367	612	201	861	904
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(l)	1.00	0.00	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	33.6	0.0	31.7	26.5	20.1	22.0	34.5	18.2	19.5	30.9	13.8	13.8
Incr Delay (d2), s/veh	16.2	0.0	2.1	9.8	0.0	0.6	26.2	3.2	13.5	89.2	4.8	4.6
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	0.9	0.0	0.6	6.9	0.0	2.3	0.3	8.5	11.3	8.8	10.1	10.5
LnGrp Delay(d),s/veh	49.9	0.0	33.8	36.3	20.1	22.6	60.6	21.4	33.0	120.2	18.6	18.4
LnGrp LOS	D		C	D	C	C	E	C	C	F	B	B
Approach Vol, veh/h		65			774			1503			1464	
Approach Delay, s/veh		42.7			33.8			25.6			33.7	
Approach LOS		D			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	12.0	31.0	19.0	7.9	4.6	38.4	6.0	20.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	10.0	22.8	14.5	3.2	2.4	20.9	3.4	7.1				
Green Ext Time (p_c), s	0.0	2.9	0.4	0.0	0.0	5.6	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			30.7									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Future Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	18.0	17.4	8.2	16.3	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	18.0	17.4	8.2	16.3	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.96	0.94	0.87	0.76	0.00	0.87	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	35.0	34.7	39.4	30.6	0.0	40.5	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	35.3	33.7	33.8	7.1	0.0	38.4	0.3	0.1	8.5	11.9	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	2.5	13.1	10.6	5.7	9.2	0.0	4.8	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	70.2	68.4	73.2	37.7	0.0	78.9	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		847			527			874			1471	
Approach Delay, s/veh		68.1			48.7			30.3			38.8	
Approach LOS		E			D			C			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	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	20.0	8.5	34.0	6.1	18.3				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			44.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	453	142	98	344	3	161	0	175	7	2	0
Future Volume (veh/h)	0	453	142	98	344	3	161	0	175	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	552	173	120	420	4	196	0	213	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	721	225	151	1515	14	680	0	576	420	81	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2580	806	1630	3301	31	1474	0	1568	800	221	0
Grp Volume(v), veh/h	0	367	358	120	207	217	196	0	213	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1474	0	1568	1022	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	4.1	0.0	5.1	4.1	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	466	151	746	783	680	0	576	502	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.29	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	783	680	0	576	502	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.7	0.0	12.0	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	4.9	9.2	0.2	0.2	1.1	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.8	1.9	2.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.7	22.0	32.2	8.9	8.9	12.7	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		725			544			409			11	
Approach Delay, s/veh		21.8			14.0			13.3			10.6	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.3	19.0		23.5	0.0	28.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+l1), s		7.1	5.7	12.2		6.1	0.0	6.1				
Green Ext Time (p_c), s		1.5	0.1	2.3		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			17.2									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	638	114	190	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	144	234	1403	11	595	5	507	315	284	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2916	520	1660	3369	25	1383	14	1509	644	846	0
Grp Volume(v), veh/h	1	376	376	190	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1490	0	0
Q Serve(g_s), s	0.0	11.1	11.1	6.1	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.1	11.1	6.1	4.3	4.3	2.7	0.0	3.2	2.7	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	476	475	234	690	724	600	0	507	599	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	157	565	564	306	698	733	600	0	507	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.4	22.8	10.6	10.6	13.0	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.6	6.3	6.4	11.8	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.1	6.1	3.6	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.9	24.7	24.8	34.6	10.8	10.8	13.7	0.0	14.3	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		753			591			237			2	
Approach Delay, s/veh		24.8			18.4			14.0			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.2	19.7		22.9	4.6	27.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.2	8.1	13.1		4.7	2.0	6.3				
Green Ext Time (p_c), s		0.8	0.1	2.0		0.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			20.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	647	29	129	553	238	40	259	70	181	363	586
Future Volume (veh/h)	503	647	29	129	553	238	40	259	70	181	363	586
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	519	667	30	133	570	0	41	267	72	187	374	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	610	981	44	167	704	315	67	686	181	225	632	537
Arrive On Green	0.18	0.28	0.28	0.10	0.20	0.00	0.04	0.25	0.25	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2717	719	1757	1845	1568
Grp Volume(v), veh/h	519	342	355	133	570	0	41	169	170	187	374	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	11.0	12.9	12.9	5.6	11.8	0.0	1.7	6.1	6.3	7.8	12.6	0.0
Cycle Q Clear(g_c), s	11.0	12.9	12.9	5.6	11.8	0.0	1.7	6.1	6.3	7.8	12.6	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	610	503	522	167	704	315	67	438	429	225	632	537
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.62	0.39	0.40	0.83	0.59	0.00
Avail Cap(c_a), veh/h	663	541	561	220	830	371	116	438	429	245	632	537
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.0	23.9	23.9	33.3	28.6	0.0	35.7	23.3	23.4	32.0	20.4	0.0
Incr Delay (d2), s/veh	9.7	3.1	3.1	14.1	5.2	0.0	8.9	2.5	2.7	19.5	4.0	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	6.0	6.7	7.0	3.3	6.1	0.0	1.0	3.2	3.3	5.0	7.0	0.0
LnGrp Delay(d),s/veh	39.7	27.0	27.0	47.4	33.8	0.0	44.6	25.8	26.1	51.5	24.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1216			703			380			561	
Approach Delay, s/veh		32.4			36.4			28.0			33.5	
Approach LOS		C			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	14.2	23.5	11.7	25.9	7.4	30.3	17.8	19.8				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	9.8	8.3	7.6	14.9	3.7	14.6	13.0	13.8				
Green Ext Time (p_c), s	0.0	1.4	0.1	2.7	0.0	1.6	0.4	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			33.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	384	97	290	293	257	32	408	348	209	539	83
Future Volume (veh/h)	109	384	97	290	293	257	32	408	348	209	539	83
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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	125	441	111	333	337	295	37	469	400	240	620	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	757	289	374	624	526	63	839	387	323	1554	479
Arrive On Green	0.09	0.21	0.21	0.21	0.33	0.33	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	125	441	111	333	337	295	37	469	400	240	620	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.3	8.6	5.4	14.0	11.3	11.8	1.6	9.3	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.3	8.6	5.4	14.0	11.3	11.8	1.6	9.3	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	757	289	374	624	526	63	839	387	323	1554	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	829	317	404	624	526	136	839	387	336	1554	479
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	27.1	25.8	29.5	20.7	20.9	36.5	25.2	28.9	33.9	21.1	19.7
Incr Delay (d2), s/veh	8.3	0.9	0.8	20.2	0.9	1.4	8.4	2.7	54.3	8.3	0.8	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	3.0	4.3	2.1	8.9	6.0	5.3	0.9	4.7	13.9	2.8	3.6	1.6
LnGrp Delay(d),s/veh	42.6	28.0	26.7	49.7	21.7	22.3	44.9	27.9	83.2	42.2	21.9	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		677			965			906			955	
Approach Delay, s/veh		30.5			31.5			53.0			26.9	
Approach LOS		C			C			D			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	11.7	23.5	20.7	20.9	7.2	28.0	11.4	30.2				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.3	13.8				
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Existing Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	393	95	132	548	88	71	488	112	192	736	160
Future Volume (veh/h)	179	393	95	132	548	88	71	488	112	192	736	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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	201	442	107	148	616	99	80	548	126	216	827	180
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	775	186	186	740	119	195	973	431	277	1259	272
Arrive On Green	0.14	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2827	679	1774	3052	489	3408	3505	1551	3442	4185	905
Grp Volume(v), veh/h	201	275	274	148	357	358	80	548	126	216	669	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1736	1774	1770	1771	1704	1752	1551	1721	1695	1700
Q Serve(g_s), s	7.6	9.2	9.3	5.6	13.1	13.1	1.6	9.2	4.4	4.2	11.8	11.9
Cycle Q Clear(g_c), s	7.6	9.2	9.3	5.6	13.1	13.1	1.6	9.2	4.4	4.2	11.8	11.9
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	485	476	186	429	430	195	973	431	277	1020	511
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.66	0.66
Avail Cap(c_a), veh/h	246	485	476	231	465	466	249	973	431	277	1020	511
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(l)	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	28.8	21.3	21.4	29.9	24.6	24.6	31.2	21.2	19.4	30.9	20.8	20.9
Incr Delay (d2), s/veh	20.4	1.5	1.7	14.4	11.4	11.6	1.4	2.4	1.7	13.4	3.3	6.6
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	5.1	4.6	4.6	3.5	7.7	7.8	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	49.2	22.9	23.1	44.3	36.0	36.2	32.5	23.5	21.2	44.3	24.1	27.5
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		750			863			754			1223	
Approach Delay, s/veh		30.0			37.5			24.1			28.6	
Approach LOS		C			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	10.0	23.5	11.7	23.3	8.4	25.1	13.8	21.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+l1), s	6.2	11.2	7.6	11.3	3.6	13.9	9.6	15.1				
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			30.1									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Existing Plus Project Apts PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	444	1348	886	30	37	312
Future Volume (vph)	444	1348	886	30	37	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.17	1.00	1.00		0.95	1.00
Satd. Flow (perm)	321	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	448	1362	895	30	37	315
RTOR Reduction (vph)	0	0	0	0	0	240
Lane Group Flow (vph)	448	1362	925	0	37	75
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.5	58.5	37.4		19.6	19.6
Effective Green, g (s)	59.2	59.6	38.5		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	501	2403	1536		413	377
v/s Ratio Prot	c0.18	0.39	0.27		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.89	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.4	7.0	18.4		26.1	26.5
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	14.2	0.3	0.8		0.1	0.2
Delay (s)	33.4	4.2	19.2		26.1	26.7
Level of Service	C	A	B		C	C
Approach Delay (s)		11.4	19.2		26.6	
Approach LOS		B	B		C	
Intersection Summary						
HCM 2000 Control Delay			15.5		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			86.9		Sum of lost time (s)	11.6
Intersection Capacity Utilization			65.9%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1435	0	0	969	229	425	3	357	0	0	0
Future Volume (vph)	0	1435	0	0	969	229	425	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3368		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3368		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1527	0	0	1031	244	452	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1527	0	0	1275	0	226	229	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.5			37.4		19.6	19.6	19.6			
Effective Green, g (s)		59.6			38.5		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2390			1492		386	388	364			
v/s Ratio Prot		c0.44			c0.38		0.14	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.59	0.59	0.89			
Uniform Delay, d1		7.6			21.7		29.6	29.6	32.2			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.5		2.3	2.4	21.8			
Delay (s)		8.3			14.2		31.8	32.0	54.0			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.3			14.2			42.0			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			18.1			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			86.9			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			68.4%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Existing Plus Project Apts PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1442	1257	0	388	370		
Future Volume (veh/h)	0	1442	1257	0	388	370		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1502	1309	0	404	385		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1819	1819	0	1072	493		
Arrive On Green	0.00	0.52	0.52	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1502	1309	0	404	385		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	17.2	13.7	0.0	4.4	10.6		
Cycle Q Clear(g_c), s	0.0	17.2	13.7	0.0	4.4	10.6		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1819	1819	0	1072	493		
V/C Ratio(X)	0.00	0.83	0.72	0.00	0.38	0.78		
Avail Cap(c_a), veh/h	0	2490	2490	0	1314	605		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.5	8.7	0.0	12.6	14.7		
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	0.2	4.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.5	6.4	0.0	2.0	5.2		
LnGrp Delay(d),s/veh	0.0	10.8	9.0	0.0	12.8	19.6		
LnGrp LOS		B	A		B	B		
Approach Vol, veh/h		1502	1309		789			
Approach Delay, s/veh		10.8	9.0		16.1			
Approach LOS		B	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.9		18.6		28.9		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		19.2		12.6		15.7		
Green Ext Time (p_c), s		4.6		1.4		4.1		
Intersection Summary								
HCM 2010 Ctrl Delay			11.3					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	752	348	527	12	499	1062	529	495	31
Future Volume (veh/h)	28	327	7	752	348	527	12	499	1062	529	495	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	783	362	0	12	520	1106	551	516	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	53	503	10	770	1199	809	29	844	1294	598	1340	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3351	207
Grp Volume(v), veh/h	29	170	178	783	362	0	12	520	1106	551	269	279
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.9	10.9	26.0	8.7	0.0	0.8	15.1	17.4	18.1	12.4	12.5
Cycle Q Clear(g_c), s	1.9	10.9	10.9	26.0	8.7	0.0	0.8	15.1	17.4	18.1	12.4	12.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	53	251	263	770	1199	809	29	844	1294	598	700	722
V/C Ratio(X)	0.54	0.68	0.68	1.02	0.30	0.00	0.41	0.62	0.85	0.92	0.38	0.39
Avail Cap(c_a), veh/h	104	688	719	770	1995	1165	93	1046	1453	598	738	762
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	45.9	45.9	43.9	27.2	0.0	55.4	38.5	8.7	46.2	24.2	24.2
Incr Delay (d2), s/veh	3.2	6.6	6.4	36.6	0.3	0.0	3.4	0.7	4.8	20.4	0.3	0.3
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	0.9	5.5	5.8	15.9	4.2	0.0	0.4	7.4	7.3	10.2	6.1	6.3
LnGrp Delay(d),s/veh	57.5	52.5	52.3	80.6	27.5	0.0	58.8	39.3	13.4	66.6	24.6	24.6
LnGrp LOS	E	D	D	F	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1145			1638			1099	
Approach Delay, s/veh		52.8			63.8			22.0			45.6	
Approach LOS		D			E			C			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	32.0	22.5	7.9	51.5	9.1	45.4	26.0	33.4				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	28.0	12.9	2.8	14.5	3.9	10.7	20.1	19.4				
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7				
Intersection Summary												
HCM 2010 Ctrl Delay			42.0									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Existing Plus Project Apts PM

Intersection

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	21.9	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	108	11	174	203	1309	17	210	964	40
Future Volume (veh/h)	90	29	211	108	11	174	203	1309	17	210	964	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	109	11	176	205	1322	17	212	974	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	305	257	237	24	230	238	1511	19	245	1046	465
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.30	0.30
Sat Flow, veh/h	1757	1845	1554	1618	163	1570	1774	5174	67	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	120	0	176	205	866	473	212	974	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.2	12.3	5.7	0.0	10.0	10.5	22.6	22.6	10.9	24.9	1.7
Cycle Q Clear(g_c), s	2.7	3.2	12.3	5.7	0.0	10.0	10.5	22.6	22.6	10.9	24.9	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	290	305	257	261	0	230	238	990	540	245	1046	465
V/C Ratio(X)	0.21	0.24	0.83	0.46	0.00	0.76	0.86	0.88	0.88	0.87	0.93	0.09
Avail Cap(c_a), veh/h	378	397	334	479	0	422	248	1021	557	248	1066	474
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	33.7	37.5	35.7	0.0	38.1	39.4	31.3	31.3	39.2	31.8	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.6	1.3	0.0	5.2	24.4	8.4	14.2	25.7	13.8	0.1
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	1.4	1.6	6.2	2.9	0.0	4.7	6.7	11.7	13.7	7.0	14.1	0.8
LnGrp Delay(d),s/veh	33.9	34.1	50.1	36.9	0.0	43.4	63.8	39.7	45.5	64.9	45.7	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			296			1544			1226	
Approach Delay, s/veh		44.0			40.8			44.7			48.3	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		21.4	18.5	33.5		19.6	18.8	33.1				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		14.3	12.5	26.9		12.0	12.9	24.6				
Green Ext Time (p_c), s		0.7	0.0	0.6		1.0	0.0	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			45.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 				 			 	
Traffic Volume (veh/h)	20	6	15	428	11	225	26	1282	678	144	1012	34
Future Volume (veh/h)	20	6	15	428	11	225	26	1282	678	144	1012	34
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	22	7	16	470	12	247	29	1409	745	158	1112	37
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	31	70	572	385	327	44	1556	696	161	1768	59
Arrive On Green	0.02	0.06	0.06	0.17	0.21	0.21	0.02	0.44	0.44	0.09	0.51	0.51
Sat Flow, veh/h	1774	505	1154	3442	1863	1583	1774	3539	1583	1774	3496	116
Grp Volume(v), veh/h	22	0	23	470	12	247	29	1409	745	158	563	586
Grp Sat Flow(s),veh/h/ln	1774	0	1659	1721	1863	1583	1774	1770	1583	1774	1770	1842
Q Serve(g_s), s	0.8	0.0	0.9	8.7	0.3	9.7	1.1	24.4	29.0	5.9	15.2	15.2
Cycle Q Clear(g_c), s	0.8	0.0	0.9	8.7	0.3	9.7	1.1	24.4	29.0	5.9	15.2	15.2
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	36	0	100	572	385	327	44	1556	696	161	895	932
V/C Ratio(X)	0.62	0.00	0.23	0.82	0.03	0.76	0.65	0.91	1.07	0.98	0.63	0.63
Avail Cap(c_a), veh/h	108	0	201	626	452	384	108	1556	696	161	895	932
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	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	32.1	0.0	29.5	26.5	20.9	24.6	31.9	17.2	18.5	29.9	11.8	11.8
Incr Delay (d2), s/veh	16.0	0.0	1.2	8.0	0.0	7.0	15.1	9.1	54.4	64.4	3.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	4.7	0.2	4.8	0.7	13.7	23.1	5.7	8.2	8.5
LnGrp Delay(d),s/veh	48.1	0.0	30.7	34.5	20.9	31.6	47.0	26.3	72.9	94.3	15.2	15.0
LnGrp LOS	D		C	C	C	C	D	C	F	F	B	B
Approach Vol, veh/h		45			729			2183			1307	
Approach Delay, s/veh		39.2			33.3			42.5			24.7	
Approach LOS		D			C			D			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	10.0	33.0	15.0	8.0	5.6	37.4	5.3	17.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	7.9	31.0	10.7	2.9	3.1	17.2	2.8	11.7				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.0	0.0	6.2	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			35.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Future Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	212	1370	600	208	1363	610
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.9	6.7	6.7	13.7	0.0	8.7	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.9	6.7	6.7	13.7	0.0	8.7	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	212	1370	600	208	1363	610
V/C Ratio(X)	0.85	0.93	0.42	0.86	0.76	0.00	0.84	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1363	610
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.9	30.8	40.3	33.0	0.0	38.6	26.4	18.4	38.9	22.1	0.0
Incr Delay (d2), s/veh	21.9	29.0	0.9	35.9	8.4	0.0	19.9	11.8	0.2	33.2	0.8	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	3.7	11.7	2.9	4.9	7.9	0.0	5.4	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	63.9	31.7	76.2	41.4	0.0	58.5	38.2	18.6	72.1	22.8	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		727			439			1594			1008	
Approach Delay, s/veh		57.6			52.1			38.8			31.8	
Approach LOS		E			D			D			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	15.0	39.2	12.4	23.0	15.2	39.0	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.9	10.7	18.7	8.1	15.7				
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			42.1									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	820	145	89	375	4	89	2	165	5	0	1
Future Volume (veh/h)	0	820	145	89	375	4	89	2	165	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	837	148	91	383	4	91	2	168	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	990	175	114	1675	17	598	12	524	440	11	66
Arrive On Green	0.00	0.35	0.35	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2866	507	1675	3389	35	1368	34	1524	934	32	193
Grp Volume(v), veh/h	0	493	492	91	189	198	93	0	168	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1403	0	1524	1159	0	0
Q Serve(g_s), s	0.0	15.0	15.0	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	3.0	3.6	3.6	2.1	0.0	4.5	2.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	583	583	114	826	867	610	0	524	517	0	0
V/C Ratio(X)	0.00	0.85	0.85	0.80	0.23	0.23	0.15	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	634	634	196	826	867	610	0	524	517	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.7	0.0	13.5	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	9.6	12.1	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	8.5	1.7	1.7	1.7	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	37.6	8.1	8.1	13.2	0.0	15.1	12.1	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		985			478			261			6	
Approach Delay, s/veh		26.4			13.8			14.4			12.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.3	23.7		23.6	0.0	32.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.5	5.0	17.0		4.1	0.0	5.6				
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			21.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	806	312	422	2003	0	413	0	363	0	464	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2400	929	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	535	511	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.8	23.8	16.7	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.8	23.8	16.7	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	572	546	422	2003	0	413	0	363	0	464	0
V/C Ratio(X)	0.43	0.94	0.94	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	577	551	456	2003	0	413	0	363	0	464	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	25.2	25.2	28.8	7.9	0.0	23.7	0.0	23.2	0.0	22.1	0.0
Incr Delay (d2), s/veh	91.1	22.7	23.5	20.9	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.7	14.2	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.1	47.8	48.7	49.7	8.0	0.0	24.8	0.0	24.4	0.0	22.1	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1047			791			155			3	
Approach Delay, s/veh		48.3			28.2			24.6			22.1	
Approach LOS		D			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		24.0	23.5	30.8		24.0	4.6	49.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.2	18.7	25.8		2.1	2.0	6.4				
Green Ext Time (p_c), s		0.5	0.3	0.5		0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			38.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	628	11	78	677	271	34	288	150	226	259	510
Future Volume (veh/h)	474	628	11	78	677	271	34	288	150	226	259	510
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	494	654	11	81	705	0	35	300	156	235	270	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	553	280	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2252	1143	1757	1845	1568
Grp Volume(v), veh/h	494	325	340	81	705	0	35	232	224	235	270	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1643	1757	1845	1568
Q Serve(g_s), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.5	10.5	8.8	0.0
Cycle Q Clear(g_c), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.5	10.5	8.8	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.91	0.57	0.57	0.78	0.89	0.00	0.59	0.54	0.56	0.92	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.0	22.2	22.2	36.9	29.8	0.0	37.8	26.1	26.2	33.6	19.3	0.0
Incr Delay (d2), s/veh	19.9	1.3	1.2	16.8	11.6	0.0	8.9	4.8	5.4	36.7	1.9	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	6.8	6.1	6.3	2.2	8.7	0.0	0.9	4.9	4.9	7.7	4.8	0.0
LnGrp Delay(d),s/veh	52.9	23.5	23.4	53.7	41.4	0.0	46.8	30.9	31.7	70.3	21.2	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1159			786			491			505	
Approach Delay, s/veh		36.0			42.7			32.4			44.0	
Approach LOS		D			D			C			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	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	12.5	11.5	5.6	14.1	3.6	10.8	13.2	17.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary 12: N Main St & W Alvin Dr/E Alvin Dr

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	216	60	217	216	234	107	933	236	181	1078	219
Future Volume (veh/h)	195	216	60	217	216	234	107	933	236	181	1078	219
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		0.97	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	225	62	226	225	244	111	972	246	189	1123	228
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	694	302	271	390	327	141	1239	313	277	1566	478
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4033	1018	3442	5085	1552
Grp Volume(v), veh/h	203	225	62	226	225	244	111	817	401	189	1123	228
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1660	1721	1695	1552
Q Serve(g_s), s	7.6	3.7	2.3	8.5	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.5	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	247	694	302	271	390	327	141	1042	510	277	1566	478
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.58	0.75	0.78	0.78	0.79	0.68	0.72	0.48
Avail Cap(c_a), veh/h	312	932	406	324	504	422	169	1042	510	277	1566	478
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	28.6	23.6	23.0	28.1	24.3	25.3	30.9	21.6	21.6	30.6	21.0	19.2
Incr Delay (d2), s/veh	13.0	0.3	0.3	14.6	1.3	5.2	18.1	5.9	11.6	6.7	2.9	3.4
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	4.6	1.8	1.0	5.2	4.0	4.7	2.8	7.9	8.6	2.0	6.7	3.9
LnGrp Delay(d),s/veh	41.6	23.8	23.3	42.7	25.6	30.5	49.0	27.5	33.2	37.3	23.9	22.6
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		490			695			1329			1540	
Approach Delay, s/veh		31.1			32.9			31.0			25.3	
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	10.0	25.5	14.9	17.9	10.0	25.5	14.0	18.8				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	5.7	17.1	10.5	5.7	6.2	15.4	9.6	12.0				
Green Ext Time (p_c), s	0.0	2.6	0.1	1.2	0.0	3.1	0.1	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			29.2									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Existing Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	613	81	160	498	168	138	880	184	297	835	206
Future Volume (veh/h)	219	613	81	160	498	168	138	880	184	297	835	206
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	223	626	83	163	508	171	141	898	188	303	852	210
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	804	106	194	576	193	215	1067	465	367	1403	343
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3136	415	1774	2601	871	3442	3539	1544	3442	4057	993
Grp Volume(v), veh/h	223	353	356	163	345	334	141	898	188	303	711	351
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1702	1721	1770	1544	1721	1695	1659
Q Serve(g_s), s	9.8	14.7	14.8	7.2	15.0	15.1	3.2	18.9	7.7	6.9	13.8	14.0
Cycle Q Clear(g_c), s	9.8	14.7	14.8	7.2	15.0	15.1	3.2	18.9	7.7	6.9	13.8	14.0
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	256	454	457	194	392	377	215	1067	465	367	1172	574
V/C Ratio(X)	0.87	0.78	0.78	0.84	0.88	0.89	0.66	0.84	0.40	0.82	0.61	0.61
Avail Cap(c_a), veh/h	256	462	466	194	400	385	238	1067	465	367	1172	574
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	33.3	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.6	21.6
Incr Delay (d2), s/veh	26.0	8.0	8.1	26.8	19.5	21.1	5.6	8.1	2.6	14.2	2.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	8.2	8.3	5.0	9.4	9.3	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	59.3	35.5	35.6	61.6	49.4	51.1	42.1	34.1	24.7	49.0	23.9	26.4
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		932			842			1227			1365	
Approach Delay, s/veh		41.3			52.5			33.6			30.1	
Approach LOS		D			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	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.8	5.2	16.0	11.8	17.1				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			37.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Future Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	240	431	360	196	504	428	164	1473	138	194	1670	0
Arrive On Green	0.07	0.23	0.23	0.11	0.27	0.00	0.09	0.31	0.31	0.11	0.33	0.00
Sat Flow, veh/h	3442	1863	1559	1757	1845	1568	1774	4728	442	1774	5253	0
Grp Volume(v), veh/h	161	378	308	163	364	0	131	485	258	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1559	1757	1845	1568	1774	1695	1780	1774	1695	0
Q Serve(g_s), s	3.5	14.9	14.4	6.9	13.6	0.0	5.5	8.8	8.9	6.5	17.9	0.0
Cycle Q Clear(g_c), s	3.5	14.9	14.4	6.9	13.6	0.0	5.5	8.8	8.9	6.5	17.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.00
Lane Grp Cap(c), veh/h	240	431	360	196	504	428	164	1056	554	194	1670	0
V/C Ratio(X)	0.67	0.88	0.85	0.83	0.72	0.00	0.80	0.46	0.46	0.80	0.79	0.00
Avail Cap(c_a), veh/h	271	452	379	196	509	432	168	1056	554	310	1856	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.6	28.2	28.1	33.1	25.1	0.0	33.9	21.1	21.1	33.1	23.2	0.0
Incr Delay (d2), s/veh	5.3	17.0	16.6	25.0	5.0	0.0	22.8	0.3	0.6	7.4	2.1	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	1.8	9.7	7.9	4.7	7.6	0.0	3.7	4.2	4.5	3.6	8.6	0.0
LnGrp Delay(d),s/veh	39.9	45.2	44.6	58.2	30.0	0.0	56.7	21.4	21.7	40.5	25.3	0.0
LnGrp LOS	D	D	D	E	C		E	C	C	D	C	
Approach Vol, veh/h		847			527			874			1471	
Approach Delay, s/veh		44.0			38.7			26.8			26.9	
Approach LOS		D			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	12.8	28.2	13.0	22.1	11.5	29.5	9.8	25.3				
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	13.3	21.7	8.5	18.5	7.2	27.8	6.0	21.0				
Max Q Clear Time (g_c+I1), s	8.5	10.9	8.9	16.9	7.5	19.9	5.5	15.6				
Green Ext Time (p_c), s	0.2	3.6	0.0	0.6	0.0	5.2	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			32.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Apts AM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
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	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	638	114	190	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	885	396	235	1339	10	614	5	523	327	295	0
Arrive On Green	0.00	0.26	0.26	0.14	0.40	0.40	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3369	25	1381	14	1509	649	851	0
Grp Volume(v), veh/h	1	638	114	190	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1739	1395	0	1509	1501	0	0
Q Serve(g_s), s	0.0	9.0	3.2	5.9	4.3	4.3	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.0	3.2	5.9	4.3	4.3	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	885	396	235	658	691	619	0	523	622	0	0
V/C Ratio(X)	0.31	0.72	0.29	0.81	0.30	0.30	0.19	0.00	0.23	0.00	0.00	0.00
Avail Cap(c_a), veh/h	162	1166	522	316	721	757	619	0	523	622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.5	18.0	15.8	22.1	10.9	10.9	12.1	0.0	12.3	11.3	0.0	0.0
Incr Delay (d2), s/veh	46.4	1.5	0.4	10.8	0.2	0.2	0.7	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.4	1.4	3.4	2.0	2.1	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	72.8	19.5	16.2	32.8	11.2	11.2	12.8	0.0	13.4	11.4	0.0	0.0
LnGrp LOS	E	B	B	C	B	B	B		B	B		
Approach Vol, veh/h		753			591			237			2	
Approach Delay, s/veh		19.1			18.1			13.1			11.3	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.0	18.2		22.9	4.6	25.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.0	7.9	11.0		4.5	2.0	6.3				
Green Ext Time (p_c), s		0.8	0.1	2.7		0.0	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			17.8									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Existing Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Future Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	413	344	168	417	355	216	1517	161	221	1670	0
Arrive On Green	0.09	0.22	0.22	0.09	0.22	0.00	0.12	0.33	0.33	0.12	0.33	0.00
Sat Flow, veh/h	3442	1863	1551	1774	1863	1583	1774	4657	494	1774	5253	0
Grp Volume(v), veh/h	236	358	133	135	304	0	177	933	484	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1551	1774	1863	1583	1774	1695	1761	1774	1695	0
Q Serve(g_s), s	5.2	14.3	5.6	5.8	11.7	0.0	7.5	19.7	19.7	7.8	10.0	0.0
Cycle Q Clear(g_c), s	5.2	14.3	5.6	5.8	11.7	0.0	7.5	19.7	19.7	7.8	10.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	318	413	344	168	417	355	216	1104	573	221	1670	0
V/C Ratio(X)	0.74	0.87	0.39	0.80	0.73	0.00	0.82	0.84	0.84	0.83	0.49	0.00
Avail Cap(c_a), veh/h	335	447	372	172	447	380	264	1160	603	221	1670	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	28.9	25.6	34.2	27.8	0.0	33.1	24.2	24.2	33.0	20.8	0.0
Incr Delay (d2), s/veh	8.1	15.5	0.7	22.7	5.5	0.0	15.4	5.7	10.3	23.1	0.2	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	2.8	9.1	2.5	3.9	6.6	0.0	4.6	10.1	11.2	5.2	4.7	0.0
LnGrp Delay(d),s/veh	42.2	44.5	26.3	56.9	33.3	0.0	48.5	29.9	34.5	56.1	21.0	0.0
LnGrp LOS	D	D	C	E	C		D	C	C	E	C	
Approach Vol, veh/h		727			439			1594			1008	
Approach Delay, s/veh		40.4			40.6			33.3			27.4	
Approach LOS		D			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	14.1	29.6	11.8	21.6	13.9	29.8	11.6	21.8				
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	9.6	26.4	7.5	18.5	11.5	24.5	7.5	18.5				
Max Q Clear Time (g_c+I1), s	9.8	21.7	7.8	16.3	9.5	12.0	7.2	13.7				
Green Ext Time (p_c), s	0.0	3.4	0.0	0.6	0.1	4.6	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			34.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Existing Plus Project Apts PM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
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	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	994	444	429	1864	0	452	0	397	0	508	0
Arrive On Green	0.00	0.29	0.29	0.25	0.54	0.00	0.27	0.00	0.27	0.00	0.27	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	14.4	12.0	15.2	4.4	0.0	3.6	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	14.4	12.0	15.2	4.4	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	994	444	429	1864	0	452	0	397	0	508	0
V/C Ratio(X)	0.42	0.76	0.66	0.89	0.22	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	119	1262	564	499	2039	0	452	0	397	0	508	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	23.0	22.2	26.0	8.7	0.0	20.3	0.0	19.9	0.0	18.9	0.0
Incr Delay (d2), s/veh	87.9	2.1	1.9	16.6	0.1	0.0	0.9	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.0	5.3	9.2	2.1	0.0	1.4	0.0	1.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	123.5	25.1	24.1	42.6	8.7	0.0	21.2	0.0	20.9	0.0	19.0	0.0
LnGrp LOS	F	C	C	D	A		C		C		B	
Approach Vol, veh/h		1047			791			155			3	
Approach Delay, s/veh		24.9			25.1			21.0			19.0	
Approach LOS		C			C			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.0	22.1	25.4		24.0	4.6	42.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.7	17.2	16.4		2.1	2.0	6.4				
Green Ext Time (p_c), s		0.5	0.4	4.5		0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			24.7									
HCM 2010 LOS			C									

Appendix I

Background Growth

Derivation

Background Growth Derivation

Int	Source	Year	AM Peak Hour														PM Peak Hour														% Change	
			Net Change							Total							Net Change							Total								
			NB	NB	NB	NB	NB	NB	NB	EB	EB	EB	WB	WB	WB	R	Total	Per Year	Total	Per Year	Total	Per Year	Total	Per Year	Total	Per Year	Total	Per Year	Total	Per Year	% Change	
1. Adams Street / West Laurel Drive																																
KHTE Counts		2019	0	0	0	21	0	432	210	804	0	0	1,008	17	2,492																	
Casa Boronda		2014	0	0	0	40	0	465	193	660	0	0	874	18	2,250	242	48	10,756%	2,151%	2,319%												
WASP		2016	0	0	0	25	0	495	174	722	0	0	887	16	2,319	173	58	7,460%	2,487%													
2. US 101 Northbound Ramps / West Laurel Drive																																
KHTE Counts		2019	283	1	147	0	0	0	867	289	0	1,193	247	3,027																		
Casa Boronda		2014	197	0	137	0	0	0	716	291	0	1,136	203	2,680	347	69	12,948%	2,590%	3,074%													
WASP		2016	244	0	116	0	0	0	778	227	0	1,156	214	2,735	292	97	10,676%	3,559%														
3. US 101 Southbound Offramp / West Laurel Drive																																
KHTE Counts		2019	0	0	0	210	0	360	0	946	325	0	1,220	256	3,317																	
Casa Boronda		2014	0	0	0	185	0	361	0	822	245	0	1,066	267	2,946	371	74	12,593%	2,519%	1,939%												
WASP		2016	0	0	0	191	0	360	0	844	255	0	1,155	382	3,187	130	43	4,079%	1,360%													
4. North Davis Road / Calle Del Adobe - West Laurel Drive																																
KHTE Counts		2019	23	280	809	178	282	29	29	284	9	845	441	294	3,503																	
Casa Boronda		2014	14	276	707	167	224	16	19	193	10	807	306	314	3,053	450	90	14,740%	2,948%	5,831%												
WASP		2016	13	265	784	138	227	16	20	214	16	821	1	262	2,777	726	242	26,143%	8,714%													
5. Post Drive - El Rancho Way / Calle Del Adobe																																
KHTE Counts		2019	111	22	17	60	39	0	0	233	164	168	249	39	1,102																	
Casa Boronda		2014	88	26	17	48	41	1	2	129	103	128	132	42	757	345	69	45,575%	9,115%													
6. North Davis Road / Post Drive - Commercial Driveway																																
KHTE Counts		2019	164	987	12	120	953	19	34	28	310	60	9	91	2,787																	
Casa Boronda		2014	120	911	8	106	917	26	29	18	264	42	13	56	2,510	277	55	11,036%	2,207%													

Notes:

- Data Sources:
 KHTE Counts - May 2019 traffic counts from Keith Higgins Traffic Engineer - see **Appendix C** for this data.
 Casa Boronda - Casa Boronda Agricultural Employee Housing Project, Keith Higgins Traffic Engineer, July 3, 2017.
 WASP - The Draft West Area Specific Plan Transportation Impact Analysis, Fehr & Peers, June 2018.
- Red text is estimated from adjacent intersection.

Appendix J

Level of Service

Calculations

Background

Conditions

HCM Signalized Intersection Capacity Analysis

Background AM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	231	884	1106	19	23	475
Future Volume (vph)	231	884	1106	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	227	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	254	971	1215	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	254	971	1236	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	308	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.82	0.40	0.66		0.06	0.95
Uniform Delay, d1	15.3	6.2	14.7		26.5	33.5
Progression Factor	1.74	0.38	1.00		1.00	1.00
Incremental Delay, d2	15.1	0.1	0.9		0.0	33.5
Delay (s)	41.7	2.5	15.7		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		10.6	15.7		65.2	
Approach LOS		B	B		E	
Intersection Summary						
HCM 2000 Control Delay			22.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.89			
Actuated Cycle Length (s)			89.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			67.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Future Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1048	0	0	1442	299	342	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	111	0	0	0
Lane Group Flow (vph)	0	1048	0	0	1741	0	171	172	67	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.30			c0.51		0.11	c0.11				
v/s Ratio Perm									0.04			
v/c Ratio		0.44			0.95		0.44	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.3			
Progression Factor		1.00			0.69		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.0		0.8	0.8	0.3			
Delay (s)		6.6			21.4		30.0	30.0	27.6			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.4			29.2			0.0	
Approach LOS		A			C			C			A	
Intersection Summary												
HCM 2000 Control Delay			18.0			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			89.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			60.3%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1041	1342	0	231	396		
Future Volume (veh/h)	0	1041	1342	0	231	396		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1144	1475	0	254	435		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1712	1746	0	1149	529		
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1144	1475	0	254	435		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	12.6	18.4	0.0	2.7	13.0		
Cycle Q Clear(g_c), s	0.0	12.6	18.4	0.0	2.7	13.0		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1712	1746	0	1149	529		
V/C Ratio(X)	0.00	0.67	0.84	0.00	0.22	0.82		
Avail Cap(c_a), veh/h	0	2107	2149	0	1419	653		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.4	10.8	0.0	11.6	15.0		
Incr Delay (d2), s/veh	0.0	0.3	2.3	0.0	0.1	6.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.0	9.2	0.0	1.2	6.4		
LnGrp Delay(d),s/veh	0.0	9.7	13.1	0.0	11.7	21.4		
LnGrp LOS		A	B		B	C		
Approach Vol, veh/h		1144	1475		689			
Approach Delay, s/veh		9.7	13.1		17.8			
Approach LOS		A	B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.2		20.9		29.2		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		14.6		15.0		20.4		
Green Ext Time (p_c), s		3.4		1.3		3.8		
Intersection Summary								
HCM 2010 Ctrl Delay			12.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1000	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1000	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1209	1887	301	650	663
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.2
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.3	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1522			1315			578	
Approach Delay, s/veh		47.4			30.6			14.2			41.9	
Approach LOS		D			C			B			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	40.4	20.4	9.2	29.9	9.2	51.6	14.3	24.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6				
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6				
Intersection Summary												
HCM 2010 Ctrl Delay			28.3									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background AM

Intersection

Int Delay, s/veh 38.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1127	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1127	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
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(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.7	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	58.7	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	E	C
Approach Vol, veh/h		441			190			1376			1292	
Approach Delay, s/veh		95.6			44.8			42.7			58.3	
Approach LOS		F			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6				
Intersection Summary												
HCM 2010 Ctrl Delay			56.0									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	655	0	143	0	1010	535	227	1276	0
Future Volume (veh/h)	0	0	0	655	0	143	0	1010	535	227	1276	0
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	1845	1845	1900	0	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	0	697	0	152	0	1074	569	241	1357	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	0	2	2	3	3	3
Cap, veh/h	0	479	0	1150	0	403	0	1281	573	268	2070	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.36	0.36	0.15	0.59	0.00
Sat Flow, veh/h	0	1863	0	3408	0	1568	0	3632	1583	1757	3597	0
Grp Volume(v), veh/h	0	0	0	697	0	152	0	1074	569	241	1357	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1704	0	1568	0	1770	1583	1757	1752	0
Q Serve(g_s), s	0.0	0.0	0.0	10.0	0.0	4.2	0.0	14.6	18.8	7.1	13.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.0	0.0	4.2	0.0	14.6	18.8	7.1	13.6	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	479	0	1150	0	403	0	1281	573	268	2070	0
V/C Ratio(X)	0.00	0.00	0.00	0.61	0.00	0.38	0.00	0.84	0.99	0.90	0.66	0.00
Avail Cap(c_a), veh/h	0	568	0	1313	0	478	0	1281	573	268	2070	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)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.2	0.0	16.0	0.0	15.3	16.7	21.9	7.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.6	0.0	6.7	35.9	30.4	1.6	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	0.0	0.0	0.0	4.7	0.0	1.9	0.0	8.2	13.8	5.7	6.9	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	18.8	0.0	16.6	0.0	22.0	52.5	52.3	8.8	0.0
LnGrp LOS				B		B		C	D	D	A	
Approach Vol, veh/h		0			849			1643			1598	
Approach Delay, s/veh		0.0			18.5			32.6			15.4	
Approach LOS					B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.0	23.0		17.5		35.0		17.5				
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s	8.0	19.0		16.0		31.0		16.0				
Max Q Clear Time (g_c+I1), s	9.1	20.8		0.0		15.6		12.0				
Green Ext Time (p_c), s	0.0	0.0		0.0		8.6		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				22.9								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.6	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.6	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.0	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.2	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			578			961			1619	
Approach Delay, s/veh		88.6			60.2			34.6			56.2	
Approach LOS		F			E			C			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	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.4				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			58.9									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	496	156	108	378	3	169	0	191	7	2	0
Future Volume (veh/h)	0	496	156	108	378	3	169	0	191	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	605	190	132	461	4	206	0	233	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	752	236	166	1578	14	655	0	556	388	74	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2578	808	1630	3304	29	1467	0	1568	749	210	0
Grp Volume(v), veh/h	0	403	392	132	227	238	206	0	233	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1467	0	1568	959	0	0
Q Serve(g_s), s	0.0	11.6	11.7	4.2	4.5	4.5	0.0	0.0	6.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.6	11.7	4.2	4.5	4.5	4.9	0.0	6.0	4.9	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	776	815	655	0	556	462	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.31	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	776	815	655	0	556	462	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.6	23.5	8.5	8.5	12.7	0.0	13.1	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.1	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.3	2.3	2.1	2.2	2.5	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.7	25.0	32.0	8.7	8.7	14.0	0.0	15.4	11.5	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		795			597			439			11	
Approach Delay, s/veh		24.9			13.8			14.7			11.5	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.9	20.1		23.5	0.0	30.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		8.0	6.2	13.7		6.9	0.0	6.5				
Green Ext Time (p_c), s		1.5	0.1	2.0		0.0	0.0	2.5				
Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	107	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	107	180	381	3	109	1	117	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	123	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	841	148	251	1475	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2924	514	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	411	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1719	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.7	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.7	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	494	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.6	9.8	9.9	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.8	28.9	38.4	10.6	10.6	14.9	0.0	15.7	13.0	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		824			648			260			2	
Approach Delay, s/veh		28.9			19.4			15.3			13.0	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	13.1	20.8		22.9	4.6	29.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8				
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			23.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	712	32	142	608	260	44	284	77	191	395	637
Future Volume (veh/h)	551	712	32	142	608	260	44	284	77	191	395	637
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	568	734	33	146	627	0	45	293	79	197	407	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	656	174	234	618	525
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2716	720	1757	1845	1568
Grp Volume(v), veh/h	568	376	391	146	627	0	45	185	187	197	407	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.1	7.3	8.6	14.8	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.1	7.3	8.6	14.8	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	420	411	234	618	525
V/C Ratio(X)	0.89	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.45	0.84	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	795	356	111	420	411	235	618	525
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.3	22.3	0.0
Incr Delay (d2), s/veh	15.2	5.1	4.9	18.3	8.4	0.0	9.8	3.4	3.6	23.2	5.4	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	7.3	8.0	8.3	4.0	7.4	0.0	1.2	3.8	3.8	5.7	8.4	0.0
LnGrp Delay(d),s/veh	46.5	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	56.5	27.7	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1335			773			417			604	
Approach Delay, s/veh		37.0			41.0			30.8			37.1	
Approach LOS		D			D			C			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	15.0	23.5	12.6	27.5	7.6	30.8	19.0	21.1				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	10.6	9.3	8.5	17.0	4.0	16.8	14.7	15.7				
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			37.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Future Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Cycle Q Clear(g_c), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.16	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	631	532	133	817	377	328	1522	469
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	28.3	26.8	30.0	21.5	21.7	37.4	26.8	29.9	34.9	22.3	20.7
Incr Delay (d2), s/veh	10.8	1.6	1.0	28.2	1.4	2.0	8.8	3.7	97.7	13.7	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.9	2.4	10.9	6.8	6.2	1.0	5.4	18.3	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.6	29.8	27.8	58.3	22.9	23.8	46.2	30.4	127.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		743			1061			992			1049	
Approach Delay, s/veh		32.4			35.4			74.0			29.5	
Approach LOS		C			D			E			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	12.0	23.5	22.0	21.3	7.4	28.1	12.1	31.2				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.9	21.0	17.9	11.8	3.8	10.5	7.9	15.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			43.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Future Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	217	481	118	163	676	109	88	603	138	237	910	196
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	774	189	202	768	124	200	958	424	272	1231	264
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2817	687	1774	3050	491	3408	3505	1551	3442	4192	899
Grp Volume(v), veh/h	217	301	298	163	392	393	88	603	138	237	735	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1734	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.40	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	486	477	202	446	446	200	958	424	272	996	500
V/C Ratio(X)	0.89	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	486	477	227	458	459	245	958	424	272	996	500
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	29.5	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.1	31.7	22.1	22.2
Incr Delay (d2), s/veh	31.6	2.4	2.6	17.4	17.3	17.5	1.5	3.1	2.0	24.8	4.9	9.6
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	6.2	5.3	5.3	4.0	9.3	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	61.2	24.4	24.6	47.4	42.3	42.5	33.1	25.3	22.2	56.4	27.0	31.8
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		816			948			829			1343	
Approach Delay, s/veh		34.3			43.2			25.6			33.5	
Approach LOS		C			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	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.4	16.8				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			34.4									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

Background PM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			 
Traffic Volume (vph)	486	1477	966	33	41	340
Future Volume (vph)	486	1477	966	33	41	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	272	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	491	1492	976	33	41	343
RTOR Reduction (vph)	0	0	0	0	0	259
Lane Group Flow (vph)	491	1492	1009	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.3	60.3	39.3		20.8	20.8
Effective Green, g (s)	61.0	61.4	40.4		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	466	2393	1558		423	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.51					c0.05
v/c Ratio	1.05	0.62	0.65		0.10	0.22
Uniform Delay, d1	22.5	7.9	19.2		26.6	27.2
Progression Factor	1.13	0.55	1.00		1.00	1.00
Incremental Delay, d2	48.2	0.4	1.0		0.1	0.2
Delay (s)	73.7	4.7	20.3		26.7	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		21.8	20.3		27.3	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			22.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			89.9		Sum of lost time (s)	11.6
Intersection Capacity Utilization			70.5%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1571	0	0	1054	252	460	3	393	0	0	0
Future Volume (vph)	0	1571	0	0	1054	252	460	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3366		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3366		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1671	0	0	1121	268	489	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1671	0	0	1389	0	244	248	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.3			39.3		20.8	20.8	20.8			
Effective Green, g (s)		61.4			40.4		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2380			1512		396	397	373			
v/s Ratio Prot		c0.48			c0.41		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.62	0.62	0.97			
Uniform Delay, d1		8.7			23.2		30.5	30.6	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			7.9		2.8	3.1	37.7			
Delay (s)		9.7			18.2		33.4	33.6	71.5			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.2			51.0			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			22.1			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			89.9			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			74.4%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1572	1363	0	427	396		
Future Volume (veh/h)	0	1572	1363	0	427	396		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1638	1420	0	445	412		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1883	1883	0	1073	494		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1638	1420	0	445	412		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	21.9	17.0	0.0	5.5	13.2		
Cycle Q Clear(g_c), s	0.0	21.9	17.0	0.0	5.5	13.2		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1883	1883	0	1073	494		
V/C Ratio(X)	0.00	0.87	0.75	0.00	0.41	0.83		
Avail Cap(c_a), veh/h	0	2201	2201	0	1162	535		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.7	9.6	0.0	14.4	17.0		
Incr Delay (d2), s/veh	0.0	3.2	1.0	0.0	0.2	10.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.1	8.2	0.0	2.6	7.0		
LnGrp Delay(d),s/veh	0.0	13.9	10.6	0.0	14.6	27.0		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1638	1420		857			
Approach Delay, s/veh		13.9	10.6		20.6			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.1		20.6		33.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		23.9		15.2		19.0		
Green Ext Time (p_c), s		4.1		0.8		4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			14.2					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	796	383	580	13	547	1150	582	540	34
Future Volume (veh/h)	31	360	8	796	383	580	13	547	1150	582	540	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	829	399	0	14	570	1198	606	562	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	745	1204	802	33	879	1301	578	1346	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3350	208
Grp Volume(v), veh/h	32	187	196	829	399	0	14	570	1198	606	293	304
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	56	269	281	745	1204	802	33	879	1301	578	704	726
V/C Ratio(X)	0.57	0.70	0.70	1.11	0.33	0.00	0.43	0.65	0.92	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	665	695	745	1929	1126	89	1011	1405	578	714	736
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	46.8	46.8	45.9	28.4	0.0	57.2	39.5	9.5	48.9	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.5	68.7	0.3	0.0	3.2	1.2	9.7	50.5	0.4	0.4
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	1.1	6.3	6.6	19.1	4.8	0.0	0.5	8.5	9.2	13.4	6.9	7.2
LnGrp Delay(d),s/veh	59.6	53.6	53.4	114.6	28.7	0.0	60.4	40.7	19.2	99.5	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1228			1782			1203	
Approach Delay, s/veh		53.9			86.7			26.4			62.9	
Approach LOS		D			F			C			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	32.0	24.3	8.2	53.3	9.4	46.9	26.0	35.5				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.2	4.2	12.0	22.0	22.0				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.4				
Intersection Summary												
HCM 2010 Ctrl Delay			54.4									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background PM

Intersection

Int Delay, s/veh 9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	117	12	191	223	1419	18	231	1025	44
Future Volume (veh/h)	99	32	232	117	12	191	223	1419	18	231	1025	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	118	12	193	225	1433	18	233	1035	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	251	26	244	238	1493	19	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1617	164	1571	1774	5176	65	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	130	0	193	225	939	512	233	1035	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.96	0.96	0.98	1.01	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.0	34.0	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.2	0.0	5.7	43.8	19.8	29.0	52.8	31.7	0.1
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	1.6	1.9	7.5	3.2	0.0	5.4	8.9	15.1	17.8	9.7	18.1	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	37.9	0.0	45.2	85.6	53.8	63.0	94.8	66.3	25.4
LnGrp LOS	C	C	E	D		D	F	D	E	F	F	C
Approach Vol, veh/h		380			323			1676			1312	
Approach Delay, s/veh		48.5			42.3			60.9			70.0	
Approach LOS		D			D			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.5				
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			61.2									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	471	0	248	0	1410	746	158	1113	0
Future Volume (veh/h)	0	0	0	471	0	248	0	1410	746	158	1113	0
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	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	518	0	273	0	1549	820	174	1223	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	0	422	0	1032	0	358	0	1618	724	187	2240	0
Arrive On Green	0.00	0.00	0.00	0.23	0.00	0.23	0.00	0.46	0.46	0.11	0.63	0.00
Sat Flow, veh/h	0	1863	0	3442	0	1583	0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	0	0	0	518	0	273	0	1549	820	174	1223	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1721	0	1583	0	1770	1583	1774	1770	0
Q Serve(g_s), s	0.0	0.0	0.0	7.8	0.0	9.2	0.0	24.0	26.0	5.5	11.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.8	0.0	9.2	0.0	24.0	26.0	5.5	11.0	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	422	0	1032	0	358	0	1618	724	187	2240	0
V/C Ratio(X)	0.00	0.00	0.00	0.50	0.00	0.76	0.00	0.96	1.13	0.93	0.55	0.00
Avail Cap(c_a), veh/h	0	524	0	1222	0	445	0	1618	724	187	2240	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(l)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.0	0.0	20.6	0.0	14.9	15.4	25.2	5.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	6.0	0.0	14.3	76.3	46.1	1.0	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	0.0	0.0	0.0	3.7	0.0	4.5	0.0	14.8	26.4	5.1	5.6	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.4	0.0	26.6	0.0	29.2	91.8	71.3	6.8	0.0
LnGrp LOS				C		C		C	F	E	A	
Approach Vol, veh/h		0			791			2369			1397	
Approach Delay, s/veh		0.0			22.5			50.9			14.8	
Approach LOS					C			D			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.0	30.0		16.9		40.0		16.9				
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s	6.0	26.0		16.0		36.0		16.0				
Max Q Clear Time (g_c+l1), s	7.5	28.0		0.0		13.0		11.2				
Green Ext Time (p_c), s	0.0	0.0		0.0		9.5		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay				34.9								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	374	139	143	314	260	183	1353	144	195	870	173
Future Volume (veh/h)	250	374	139	143	314	260	183	1353	144	195	870	173
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	390	145	149	327	0	191	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	390	145	149	327	0	191	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
V/C Ratio(X)	0.94	1.02	0.46	0.96	0.82	0.00	0.85	1.02	0.25	0.98	0.67	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1344	601
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.3	40.9	33.8	0.0	38.4	27.4	18.5	39.6	23.3	0.0
Incr Delay (d2), s/veh	39.4	50.8	1.0	59.1	13.1	0.0	22.7	29.6	0.2	56.9	1.3	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	4.7	14.9	3.3	6.2	9.2	0.0	6.0	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	86.6	32.4	100.0	46.8	0.0	61.2	57.0	18.7	96.5	24.6	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		795			476			1750			1109	
Approach Delay, s/veh		74.7			63.5			54.2			37.8	
Approach LOS		E			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	15.0	39.6	12.4	23.0	15.9	38.7	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.5	21.2	8.8	17.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			54.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	894	160	98	413	4	94	2	180	5	0	1
Future Volume (veh/h)	0	894	160	98	413	4	94	2	180	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	912	163	100	421	4	96	2	184	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1017	182	125	1727	16	583	11	509	419	11	63
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2861	511	1675	3393	32	1374	33	1524	911	32	188
Grp Volume(v), veh/h	0	538	537	100	207	218	98	0	184	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1685	1675	1671	1754	1406	0	1524	1131	0	0
Q Serve(g_s), s	0.0	17.3	17.3	3.4	4.0	4.0	0.0	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.3	17.3	3.4	4.0	4.0	2.3	0.0	5.2	2.3	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	600	599	125	851	893	594	0	509	493	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.17	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	616	190	851	893	594	0	509	493	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.4	17.5	26.0	7.9	7.9	13.5	0.0	14.4	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.6	15.7	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.5	10.5	2.0	1.9	2.0	1.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.0	33.1	38.7	8.0	8.0	14.1	0.0	16.4	12.8	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1075			525			282			6	
Approach Delay, s/veh		33.1			13.9			15.6			12.8	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.8	24.8		23.6	0.0	33.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+l1), s		7.2	5.4	19.3		4.3	0.0	6.0				
Green Ext Time (p_c), s		0.9	0.0	1.1		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	787	297	399	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	787	297	399	427	0	88	0	74	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	828	313	420	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	802	302	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2420	913	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	582	559	420	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1630	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	18.9	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	18.9	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	540	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.03	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	540	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	46.4	48.1	28.5	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.7	19.1	12.6	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	73.2	74.8	57.7	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1142			869			171			3	
Approach Delay, s/veh		74.0			32.0			25.8			22.9	
Approach LOS		E			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		24.0	25.0	31.0		24.0	4.6	51.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.8	20.9	28.5		2.1	2.0	6.9				
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			53.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	514	691	12	86	745	290	37	312	165	244	283	557
Future Volume (veh/h)	514	691	12	86	745	290	37	312	165	244	283	557
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	535	720	12	90	776	0	39	325	172	254	295	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	545	282	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2235	1158	1757	1845	1568
Grp Volume(v), veh/h	535	358	374	90	776	0	39	253	244	254	295	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1640	1757	1845	1568
Q Serve(g_s), s	12.4	13.7	13.7	4.0	17.5	0.0	1.8	10.2	10.6	11.5	9.9	0.0
Cycle Q Clear(g_c), s	12.4	13.7	13.7	4.0	17.5	0.0	1.8	10.2	10.6	11.5	9.9	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	0.99	0.63	0.63	0.78	0.96	0.00	0.61	0.59	0.61	1.01	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.7	23.0	23.0	36.8	30.4	0.0	38.0	26.7	26.9	34.3	20.0	0.0
Incr Delay (d2), s/veh	37.4	2.2	2.1	19.9	21.8	0.0	9.2	6.0	6.8	58.1	2.3	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	8.7	7.0	7.3	2.6	10.9	0.0	1.0	5.6	5.5	9.6	5.4	0.0
LnGrp Delay(d),s/veh	71.1	25.2	25.1	56.7	52.2	0.0	47.2	32.7	33.6	92.4	22.3	0.0
LnGrp LOS	E	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1267			866			536			549	
Approach Delay, s/veh		44.6			52.6			34.2			54.7	
Approach LOS		D			D			C			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	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	12.6	6.0	15.7	3.8	11.9	14.4	19.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			46.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	237	66	237	237	257	118	1024	259	199	1181	239
Future Volume (veh/h)	213	237	66	237	237	257	118	1024	259	199	1181	239
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	222	247	69	247	247	268	123	1067	270	207	1230	249
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	723	315	290	406	341	156	1203	304	269	1469	448
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4030	1019	3442	5085	1550
Grp Volume(v), veh/h	222	247	69	247	247	268	123	897	440	207	1230	249
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1660	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.5	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.5	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	265	723	315	290	406	341	156	1012	495	269	1469	448
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	303	905	395	315	490	411	164	1012	495	269	1469	448
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	29.1	24.0	23.3	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.2
Incr Delay (d2), s/veh	16.6	0.3	0.3	18.4	1.5	8.2	21.7	11.4	20.5	12.7	5.8	4.9
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	5.4	2.1	1.1	6.2	4.5	5.7	3.3	9.8	10.9	2.4	8.2	4.7
LnGrp Delay(d),s/veh	45.7	24.2	23.7	47.0	26.3	34.1	53.1	35.0	44.0	44.5	29.3	26.1
LnGrp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		538			762			1460			1686	
Approach Delay, s/veh		33.0			35.8			39.2			30.7	
Approach LOS		C			D			D			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	10.0	25.5	16.0	18.9	10.7	24.8	15.0	19.9				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.2	19.8	11.5	6.2	6.8	18.0	10.6	13.4				
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.6	0.1	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			34.7									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Background PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	672	89	176	543	185	152	968	202	327	919	222
Future Volume (veh/h)	238	672	89	176	543	185	152	968	202	327	919	222
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	243	686	91	180	554	189	155	988	206	334	938	227
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	815	108	193	583	198	230	1062	463	366	1382	333
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3136	416	1774	2590	880	3442	3539	1544	3442	4070	981
Grp Volume(v), veh/h	243	387	390	180	378	365	155	988	206	334	781	384
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1700	1721	1770	1544	1721	1695	1661
Q Serve(g_s), s	10.9	16.6	16.6	8.1	16.8	16.9	3.5	21.7	8.6	7.7	15.8	15.9
Cycle Q Clear(g_c), s	10.9	16.6	16.6	8.1	16.8	16.9	3.5	21.7	8.6	7.7	15.8	15.9
Prop In Lane	1.00		0.23	1.00		0.52	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	564
V/C Ratio(X)	0.95	0.84	0.84	0.93	0.95	0.95	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	564
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	34.0	28.0	28.0	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	43.4	13.1	13.2	46.0	32.3	34.2	7.1	15.3	3.1	26.6	3.2	6.5
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	8.4	9.7	9.8	6.4	11.8	11.5	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	77.4	41.1	41.2	81.4	62.8	64.8	43.6	42.4	25.7	62.0	25.9	29.2
LnGrp LOS	E	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1020			923			1349			1499	
Approach Delay, s/veh		49.8			67.2			40.0			34.8	
Approach LOS		D			E			D			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	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.6	5.5	17.9	12.9	18.9				
Green Ext Time (p_c), s	0.0	0.2	0.0	1.1	0.0	5.1	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			45.7									
HCM 2010 LOS			D									

Appendix K

Level of Service

Calculations

Background Plus Project

Ag Housing

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Background Plus Project Ag AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	231	884	1109	19	23	475
Future Volume (vph)	231	884	1109	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	225	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	254	971	1219	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	254	971	1240	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	307	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.83	0.40	0.66		0.06	0.95
Uniform Delay, d1	15.5	6.2	14.8		26.5	33.5
Progression Factor	1.74	0.38	1.00		1.00	1.00
Incremental Delay, d2	15.3	0.1	1.0		0.0	33.5
Delay (s)	42.2	2.5	15.7		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		10.7	15.7		65.2	
Approach LOS		B	B		E	
Intersection Summary						
HCM 2000 Control Delay			22.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.90			
Actuated Cycle Length (s)			89.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			67.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Future Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1048	0	0	1442	299	342	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	111	0	0	0
Lane Group Flow (vph)	0	1048	0	0	1741	0	171	172	67	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.30			c0.51		0.11	c0.11				
v/s Ratio Perm									0.04			
v/c Ratio		0.44			0.95		0.44	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.3			
Progression Factor		1.00			0.68		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.0		0.8	0.8	0.3			
Delay (s)		6.6			21.3		30.0	30.0	27.6			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.3			29.2			0.0	
Approach LOS		A			C			C			A	
Intersection Summary												
HCM 2000 Control Delay			17.9			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			89.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			60.3%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background Plus Project Ag AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1041	1342	0	231	397		
Future Volume (veh/h)	0	1041	1342	0	231	397		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1144	1475	0	254	436		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1712	1745	0	1150	529		
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1144	1475	0	254	436		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	12.6	18.4	0.0	2.7	13.1		
Cycle Q Clear(g_c), s	0.0	12.6	18.4	0.0	2.7	13.1		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1712	1745	0	1150	529		
V/C Ratio(X)	0.00	0.67	0.85	0.00	0.22	0.82		
Avail Cap(c_a), veh/h	0	2104	2145	0	1417	652		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.4	10.9	0.0	11.6	15.0		
Incr Delay (d2), s/veh	0.0	0.3	2.3	0.0	0.1	6.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.0	9.2	0.0	1.2	6.4		
LnGrp Delay(d),s/veh	0.0	9.7	13.2	0.0	11.7	21.5		
LnGrp LOS		A	B		B	C		
Approach Vol, veh/h		1144	1475		690			
Approach Delay, s/veh		9.7	13.2		17.9			
Approach LOS		A	B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.2		21.0		29.2		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		14.6		15.1		20.4		
Green Ext Time (p_c), s		3.4		1.3		3.7		
Intersection Summary								
HCM 2010 Ctrl Delay			13.0					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	931	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	931	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1001	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1001	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1208	1887	301	650	663
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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.3
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.4	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1523			1315			578	
Approach Delay, s/veh		47.5			30.6			14.2			42.0	
Approach LOS		D			C			B			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	40.4	20.4	9.2	29.9	9.2	51.7	14.3	24.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+l1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6				
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6				
Intersection Summary												
HCM 2010 Ctrl Delay			28.3									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background Plus Project Ag AM

Intersection

Int Delay, s/veh 38.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1049	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1049	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1128	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1128	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.8	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	59.0	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	F	C
Approach Vol, veh/h		441			190			1376			1293	
Approach Delay, s/veh		95.6			44.8			42.7			58.5	
Approach LOS		F			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6				
Intersection Summary												
HCM 2010 Ctrl Delay			56.1									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	655	1	143	4	1010	535	227	1276	1
Future Volume (veh/h)	0	0	2	655	1	143	4	1010	535	227	1276	1
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	2	697	1	152	4	1074	569	241	1357	1
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	3	0	85	770	620	527	8	1350	604	198	1761	1
Arrive On Green	0.00	0.00	0.05	0.23	0.34	0.34	0.00	0.38	0.38	0.11	0.49	0.49
Sat Flow, veh/h	1774	0	1583	3408	1845	1568	1774	3539	1583	1757	3594	3
Grp Volume(v), veh/h	0	0	2	697	1	152	4	1074	569	241	662	696
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1704	1845	1568	1774	1770	1583	1757	1752	1844
Q Serve(g_s), s	0.0	0.0	0.1	14.1	0.0	5.0	0.2	19.1	24.6	8.0	21.9	21.9
Cycle Q Clear(g_c), s	0.0	0.0	0.1	14.1	0.0	5.0	0.2	19.1	24.6	8.0	21.9	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	0	85	770	620	527	8	1350	604	198	859	904
V/C Ratio(X)	0.00	0.00	0.02	0.91	0.00	0.29	0.53	0.80	0.94	1.21	0.77	0.77
Avail Cap(c_a), veh/h	100	0	89	770	620	527	100	1350	604	198	859	904
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)	0.00	0.00	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	0.0	0.0	31.7	26.7	15.6	17.3	35.2	19.5	21.2	31.4	14.8	14.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	14.2	0.0	0.3	46.9	4.9	24.9	133.5	6.6	6.3
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	0.0	0.0	0.0	8.1	0.0	2.2	0.2	10.2	14.9	11.2	12.1	12.6
LnGrp Delay(d),s/veh	0.0	0.0	31.8	40.9	15.6	17.6	82.1	24.4	46.1	164.9	21.4	21.1
LnGrp LOS			C	D	B	B	F	C	D	F	C	C
Approach Vol, veh/h		2			850			1647			1599	
Approach Delay, s/veh		31.8			36.7			32.0			42.9	
Approach LOS		C			D			C			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	12.0	31.0	20.0	7.8	4.3	38.7	0.0	27.8				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	10.0	26.6	16.1	2.1	2.2	23.9	0.0	7.0				
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.6	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			37.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	354	290	156	348	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	348	107	124	650	62	149	1260	246
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	400	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	400	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.5	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.5	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.7	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.8	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.1	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.4	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			579			961			1619	
Approach Delay, s/veh		88.6			60.3			34.6			56.2	
Approach LOS		F			E			C			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	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.5				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			59.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	497	156	108	378	3	170	0	191	7	2	0
Future Volume (veh/h)	0	497	156	108	378	3	170	0	191	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	606	190	132	461	4	207	0	233	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	753	236	166	1578	14	654	0	556	387	74	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2579	807	1630	3304	29	1467	0	1568	747	210	0
Grp Volume(v), veh/h	0	404	392	132	227	238	207	0	233	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1467	0	1568	956	0	0
Q Serve(g_s), s	0.0	11.6	11.7	4.2	4.5	4.5	0.0	0.0	6.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.6	11.7	4.2	4.5	4.5	4.9	0.0	6.0	4.9	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	777	815	654	0	556	461	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.32	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	777	815	654	0	556	461	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	23.5	8.5	8.5	12.7	0.0	13.1	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.2	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.4	2.3	2.1	2.2	2.5	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.7	25.1	32.0	8.7	8.7	14.0	0.0	15.4	11.5	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		796			597			440			11	
Approach Delay, s/veh		24.9			13.8			14.8			11.5	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.9	20.2		23.5	0.0	30.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		8.0	6.2	13.7		6.9	0.0	6.5				
Green Ext Time (p_c), s		1.5	0.1	2.0		0.0	0.0	2.5				
Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	124	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	149	251	1476	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2920	517	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	412	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.7	9.9	10.0	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.9	29.0	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		825			648			260			2	
Approach Delay, s/veh		29.0			19.4			15.3			13.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8				
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			23.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	712	32	142	608	261	44	285	77	191	395	638
Future Volume (veh/h)	552	712	32	142	608	261	44	285	77	191	395	638
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	569	734	33	146	627	0	45	294	79	197	407	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	657	174	234	618	525
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2718	718	1757	1845	1568
Grp Volume(v), veh/h	569	376	391	146	627	0	45	186	187	197	407	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	8.6	14.8	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	8.6	14.8	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	420	411	234	618	525
V/C Ratio(X)	0.90	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.46	0.84	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	795	356	111	420	411	235	618	525
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.3	22.3	0.0
Incr Delay (d2), s/veh	15.4	5.1	4.9	18.3	8.4	0.0	9.8	3.4	3.6	23.2	5.4	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	7.4	8.0	8.3	4.0	7.4	0.0	1.2	3.8	3.8	5.7	8.4	0.0
LnGrp Delay(d),s/veh	46.7	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	56.5	27.7	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1336			773			418			604	
Approach Delay, s/veh		37.1			41.0			30.8			37.1	
Approach LOS		D			D			C			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	15.0	23.5	12.6	27.5	7.6	30.8	19.0	21.1				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+l1), s	10.6	9.4	8.5	17.0	4.0	16.8	14.7	15.7				
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			37.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary 12: N Main St & W Alvin Dr/E Alvin Dr

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Future Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Cycle Q Clear(g_c), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.16	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	631	532	133	817	377	328	1522	469
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	28.3	26.8	30.0	21.5	21.7	37.4	26.8	29.9	34.9	22.3	20.7
Incr Delay (d2), s/veh	10.8	1.6	1.0	28.2	1.4	2.0	8.8	3.7	97.7	13.7	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.9	2.4	10.9	6.8	6.2	1.0	5.4	18.3	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.6	29.8	27.8	58.3	22.9	23.8	46.2	30.4	127.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		743			1061			992			1049	
Approach Delay, s/veh		32.4			35.4			74.0			29.5	
Approach LOS		C			D			E			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	12.0	23.5	22.0	21.3	7.4	28.1	12.1	31.2				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.9	21.0	17.9	11.8	3.8	10.5	7.9	15.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			43.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Background Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Future Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	217	481	118	163	676	109	88	603	138	237	910	196
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	774	189	202	768	124	200	958	424	272	1231	264
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2817	687	1774	3050	491	3408	3505	1551	3442	4192	899
Grp Volume(v), veh/h	217	301	298	163	392	393	88	603	138	237	735	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1734	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.40	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	486	477	202	446	446	200	958	424	272	996	500
V/C Ratio(X)	0.89	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	486	477	227	458	459	245	958	424	272	996	500
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	29.5	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.1	31.7	22.1	22.2
Incr Delay (d2), s/veh	31.6	2.4	2.6	17.4	17.3	17.5	1.5	3.1	2.0	24.8	4.9	9.6
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	6.2	5.3	5.3	4.0	9.3	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	61.2	24.4	24.6	47.4	42.3	42.5	33.1	25.3	22.2	56.4	27.0	31.8
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		816			948			829			1343	
Approach Delay, s/veh		34.3			43.2			25.6			33.5	
Approach LOS		C			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	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.4	16.8				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			34.4									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Background Plus Project Ag PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	487	1480	970	33	41	341
Future Volume (vph)	487	1480	970	33	41	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	270	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	492	1495	980	33	41	344
RTOR Reduction (vph)	0	0	0	0	0	260
Lane Group Flow (vph)	492	1495	1013	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	39.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	40.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	464	2394	1561		422	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.52					c0.05
v/c Ratio	1.06	0.62	0.65		0.10	0.22
Uniform Delay, d1	22.5	7.9	19.2		26.7	27.2
Progression Factor	1.14	0.55	1.00		1.00	1.00
Incremental Delay, d2	50.4	0.4	1.1		0.1	0.2
Delay (s)	76.0	4.7	20.3		26.8	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		22.3	20.3		27.3	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			22.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			90.0		Sum of lost time (s)	11.6
Intersection Capacity Utilization			70.7%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1575	0	0	1059	252	462	3	393	0	0	0
Future Volume (vph)	0	1575	0	0	1059	252	462	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1676	0	0	1127	268	491	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1676	0	0	1395	0	245	249	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			39.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			40.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2382			1515		395	396	372			
v/s Ratio Prot		c0.48			c0.41		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.62	0.63	0.97			
Uniform Delay, d1		8.7			23.2		30.6	30.7	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			8.1		3.0	3.1	38.6			
Delay (s)		9.7			18.4		33.6	33.8	72.6			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.4			51.5			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			22.3			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			74.5%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background Plus Project Ag PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1580	1370	0	427	401		
Future Volume (veh/h)	0	1580	1370	0	427	401		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1646	1427	0	445	418		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1884	1884	0	1078	496		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1646	1427	0	445	418		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	22.3	17.3	0.0	5.6	13.6		
Cycle Q Clear(g_c), s	0.0	22.3	17.3	0.0	5.6	13.6		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1884	1884	0	1078	496		
V/C Ratio(X)	0.00	0.87	0.76	0.00	0.41	0.84		
Avail Cap(c_a), veh/h	0	2177	2177	0	1149	529		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.9	9.7	0.0	14.5	17.3		
Incr Delay (d2), s/veh	0.0	3.4	1.1	0.0	0.2	11.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.4	8.4	0.0	2.6	7.3		
LnGrp Delay(d),s/veh	0.0	14.3	10.8	0.0	14.7	28.2		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1646	1427		863			
Approach Delay, s/veh		14.3	10.8		21.3			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.4		20.9		33.4		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+l1), s		24.3		15.6		19.3		
Green Ext Time (p_c), s		4.0		0.7		4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			14.6					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	808	383	580	13	548	1160	582	541	34
Future Volume (veh/h)	31	360	8	808	383	580	13	548	1160	582	541	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	842	399	0	14	571	1208	606	564	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	743	1202	801	33	883	1303	577	1350	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3351	208
Grp Volume(v), veh/h	32	187	196	842	399	0	14	571	1208	606	294	305
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.3	20.0	14.2	14.3
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.3	20.0	14.2	14.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	268	281	743	1202	801	33	883	1303	577	706	728
V/C Ratio(X)	0.57	0.70	0.70	1.13	0.33	0.00	0.43	0.65	0.93	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	664	694	743	1925	1124	89	1009	1402	577	712	735
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	46.9	46.9	46.0	28.5	0.0	57.3	39.5	9.5	49.0	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.6	76.1	0.3	0.0	3.2	1.2	10.4	51.2	0.4	0.4
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	1.1	6.3	6.6	19.9	4.9	0.0	0.5	8.5	9.4	13.5	6.9	7.2
LnGrp Delay(d),s/veh	59.7	53.7	53.5	122.1	28.8	0.0	60.5	40.6	20.0	100.2	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1241			1793			1205	
Approach Delay, s/veh		54.1			92.1			26.9			63.2	
Approach LOS		D			F			C			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	32.0	24.3	8.2	53.5	9.4	46.9	26.0	35.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.3	4.2	12.0	22.0	22.3				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.3				
Intersection Summary												
HCM 2010 Ctrl Delay			56.1									
HCM 2010 LOS			E									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background Plus Project Ag PM

Intersection

Int Delay, s/veh 9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	118	12	191	223	1430	19	231	1038	44
Future Volume (veh/h)	99	32	232	118	12	191	223	1430	19	231	1038	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	119	12	193	225	1444	19	233	1048	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	252	25	244	238	1492	20	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1619	163	1571	1774	5172	68	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	131	0	193	225	946	517	233	1048	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1850	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.8	26.8	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.8	26.8	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.97	0.97	0.98	1.03	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.1	34.1	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.3	0.0	5.7	43.9	21.3	30.9	52.9	35.2	0.1
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	1.6	1.9	7.5	3.3	0.0	5.4	8.9	15.4	18.2	9.7	18.6	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	38.0	0.0	45.1	85.6	55.5	65.0	94.8	69.8	25.4
LnGrp LOS	C	C	E	D		D	F	E	E	F	F	C
Approach Vol, veh/h		380			324			1688			1325	
Approach Delay, s/veh		48.5			42.3			62.4			72.7	
Approach LOS		D			D			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.8				
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			62.9									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	24	471	7	248	23	1410	746	158	1113	14
Future Volume (veh/h)	12	6	24	471	7	248	23	1410	746	158	1113	14
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	13	7	26	518	8	273	25	1549	820	174	1223	15
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	21	77	608	417	354	39	1537	687	159	1797	22
Arrive On Green	0.01	0.06	0.06	0.18	0.22	0.22	0.02	0.43	0.43	0.09	0.50	0.50
Sat Flow, veh/h	1774	347	1288	3442	1863	1583	1774	3539	1583	1774	3581	44
Grp Volume(v), veh/h	13	0	33	518	8	273	25	1549	820	174	604	634
Grp Sat Flow(s),veh/h/ln	1774	0	1635	1721	1863	1583	1774	1770	1583	1774	1770	1855
Q Serve(g_s), s	0.5	0.0	1.3	9.7	0.2	10.8	0.9	29.0	29.0	6.0	17.3	17.3
Cycle Q Clear(g_c), s	0.5	0.0	1.3	9.7	0.2	10.8	0.9	29.0	29.0	6.0	17.3	17.3
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	23	0	98	608	417	354	39	1537	687	159	888	931
V/C Ratio(X)	0.57	0.00	0.34	0.85	0.02	0.77	0.63	1.01	1.19	1.09	0.68	0.68
Avail Cap(c_a), veh/h	106	0	196	618	446	379	106	1537	687	159	888	931
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	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	32.8	0.0	30.1	26.6	20.2	24.3	32.4	18.9	18.9	30.4	12.6	12.6
Incr Delay (d2), s/veh	20.5	0.0	2.0	10.9	0.0	8.8	15.6	24.9	100.8	98.0	4.2	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	0.4	0.0	0.6	5.5	0.1	5.6	0.6	19.2	31.8	7.2	9.4	9.8
LnGrp Delay(d),s/veh	53.3	0.0	32.2	37.5	20.2	33.2	48.0	43.8	119.7	128.4	16.8	16.6
LnGrp LOS	D		C	D	C	C	D	F	F	F	B	B
Approach Vol, veh/h		46			799			2394			1412	
Approach Delay, s/veh		38.1			35.9			69.9			30.5	
Approach LOS		D			D			E			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	10.0	33.0	15.8	8.0	5.5	37.5	4.9	18.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	8.0	31.0	11.7	3.3	2.9	19.3	2.5	12.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	6.1	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			51.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	319	260	185	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	319	260	185	1353	144	195	870	173
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	394	147	149	332	0	193	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	227	1380	605	207	1340	600
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	394	147	149	332	0	193	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.5	7.5	15.4	0.0	9.6	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.5	7.5	15.4	0.0	9.6	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	227	1380	605	207	1340	600
V/C Ratio(X)	0.94	1.03	0.46	0.96	0.84	0.00	0.85	1.02	0.25	0.98	0.68	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1340	600
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.4	40.9	33.9	0.0	38.4	27.4	18.5	39.6	23.4	0.0
Incr Delay (d2), s/veh	39.4	53.6	1.0	59.1	14.3	0.0	23.1	29.6	0.2	56.9	1.4	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	4.7	15.2	3.3	6.2	9.4	0.0	6.1	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	89.4	32.4	100.0	48.2	0.0	61.5	57.0	18.7	96.5	24.7	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		801			481			1752			1109	
Approach Delay, s/veh		76.1			64.2			54.3			37.9	
Approach LOS		E			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	15.0	39.6	12.4	23.0	16.0	38.6	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.6	21.2	8.8	17.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			55.2									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	900	160	98	413	4	101	2	181	5	0	1
Future Volume (veh/h)	0	900	160	98	413	4	101	2	181	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	918	163	100	421	4	103	2	185	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1020	181	125	1729	16	584	10	508	415	11	62
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2864	508	1675	3393	32	1379	30	1524	900	32	186
Grp Volume(v), veh/h	0	540	541	100	207	218	105	0	185	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1754	1409	0	1524	1118	0	0
Q Serve(g_s), s	0.0	17.4	17.4	3.4	4.0	4.0	0.0	0.0	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.4	17.4	3.4	4.0	4.0	2.5	0.0	5.3	2.5	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	601	600	125	852	893	594	0	508	488	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.18	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	615	615	190	852	893	594	0	508	488	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	26.1	7.9	7.9	13.6	0.0	14.5	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	16.1	16.1	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	10.6	2.0	1.8	1.9	1.3	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.5	33.6	38.8	8.0	8.0	14.2	0.0	16.5	12.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1081			525			290			6	
Approach Delay, s/veh		33.6			13.9			15.7			12.9	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.8	24.9		23.6	0.0	33.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		7.3	5.4	19.4		4.5	0.0	6.0				
Green Ext Time (p_c), s		0.9	0.0	1.0		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	303	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	303	400	427	0	88	0	74	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	319	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	797	306	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2406	924	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	586	562	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1628	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	19.0	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	19.0	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	539	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.04	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	539	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	48.4	50.2	29.0	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	20.0	19.3	12.7	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	75.1	76.9	58.2	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1149			870			171			3	
Approach Delay, s/veh		76.1			32.2			25.8			22.9	
Approach LOS		E			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		24.0	25.0	31.0		24.0	4.6	51.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.8	21.0	28.5		2.1	2.0	6.9				
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			54.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	691	12	86	745	295	37	317	165	248	287	564
Future Volume (veh/h)	520	691	12	86	745	295	37	317	165	248	287	564
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	542	720	12	90	776	0	39	330	172	258	299	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	548	280	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2247	1148	1757	1845	1568
Grp Volume(v), veh/h	542	358	374	90	776	0	39	256	246	258	299	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1642	1757	1845	1568
Q Serve(g_s), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.7	11.5	10.0	0.0
Cycle Q Clear(g_c), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.7	11.5	10.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	1.01	0.63	0.63	0.78	0.96	0.00	0.61	0.60	0.61	1.02	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	23.0	23.0	36.8	30.4	0.0	38.0	26.8	26.9	34.3	20.1	0.0
Incr Delay (d2), s/veh	40.8	2.2	2.1	19.9	21.8	0.0	9.2	6.1	6.9	62.3	2.4	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	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	7.0	7.3	2.6	10.9	0.0	1.0	5.7	5.6	9.9	5.5	0.0
LnGrp Delay(d),s/veh	74.6	25.2	25.1	56.7	52.2	0.0	47.2	32.9	33.8	96.7	22.4	0.0
LnGrp LOS	F	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1274			866			541			557	
Approach Delay, s/veh		46.2			52.6			34.3			56.8	
Approach LOS		D			D			C			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	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	12.7	6.0	15.7	3.8	12.0	14.5	19.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			47.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	237	66	238	237	257	118	1025	260	199	1182	240
Future Volume (veh/h)	214	237	66	238	237	257	118	1025	260	199	1182	240
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	223	247	69	248	247	268	123	1068	271	207	1231	250
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	722	315	291	406	341	156	1201	305	269	1468	447
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4028	1021	3442	5085	1550
Grp Volume(v), veh/h	223	247	69	248	247	268	123	899	440	207	1231	250
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1659	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.6	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.6	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	266	722	315	291	406	341	156	1011	495	269	1468	447
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	302	905	395	315	489	410	164	1011	495	269	1468	447
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	29.1	24.0	23.3	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.2
Incr Delay (d2), s/veh	16.8	0.3	0.3	18.6	1.5	8.2	21.7	11.6	20.7	12.8	5.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	2.1	1.1	6.2	4.5	5.7	3.3	9.9	11.0	2.5	8.2	4.7
LnGrp Delay(d),s/veh	45.9	24.3	23.7	47.2	26.3	34.2	53.2	35.2	44.3	44.6	29.4	26.2
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		539			763			1462			1688	
Approach Delay, s/veh		33.1			35.9			39.5			30.8	
Approach LOS		C			D			D			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	10.0	25.5	16.1	18.9	10.7	24.8	15.1	19.9				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.2	19.8	11.6	6.2	6.8	18.0	10.6	13.4				
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.6	0.1	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			34.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Background Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	674	89	176	545	185	152	968	202	327	919	224
Future Volume (veh/h)	239	674	89	176	545	185	152	968	202	327	919	224
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	244	688	91	180	556	189	155	988	206	334	938	229
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	816	108	193	583	198	230	1062	463	366	1379	335
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3137	415	1774	2592	878	3442	3539	1544	3442	4062	988
Grp Volume(v), veh/h	244	388	391	180	379	366	155	988	206	334	782	385
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1660
Q Serve(g_s), s	10.9	16.6	16.7	8.1	16.9	17.0	3.5	21.7	8.6	7.7	15.9	15.9
Cycle Q Clear(g_c), s	10.9	16.6	16.7	8.1	16.9	17.0	3.5	21.7	8.6	7.7	15.9	15.9
Prop In Lane	1.00		0.23	1.00		0.52	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	563
V/C Ratio(X)	0.96	0.84	0.84	0.93	0.95	0.96	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	563
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	34.0	28.1	28.1	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	44.4	13.3	13.4	46.0	32.8	34.7	7.1	15.3	3.1	26.6	3.2	6.6
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	8.5	9.8	9.9	6.4	11.8	11.6	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	78.4	41.4	41.4	81.4	63.4	65.3	43.6	42.4	25.7	62.0	25.9	29.3
LnGrp LOS	E	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1023			925			1349			1501	
Approach Delay, s/veh		50.2			67.7			40.0			34.8	
Approach LOS		D			E			D			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	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.7	5.5	17.9	12.9	19.0				
Green Ext Time (p_c), s	0.0	0.2	0.0	1.0	0.0	5.1	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			45.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1000	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1000	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1209	1887	301	650	663
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.2
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.3	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1522			1315			578	
Approach Delay, s/veh		47.4			30.6			14.2			41.9	
Approach LOS		D			C			B			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	40.4	20.4	9.2	29.9	9.2	51.6	14.3	24.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6				
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6				
Intersection Summary												
HCM 2010 Ctrl Delay			28.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1127	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1127	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.7	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	58.7	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	E	C
Approach Vol, veh/h		441			190			1376			1292	
Approach Delay, s/veh		95.6			44.8			42.7			58.3	
Approach LOS		F			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6				
Intersection Summary												
HCM 2010 Ctrl Delay			56.0									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.6	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.6	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.0	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.2	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			578			961			1619	
Approach Delay, s/veh		88.6			60.2			34.6			56.2	
Approach LOS		F			E			C			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	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.4				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			58.9									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Ag AM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	124	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	149	251	1476	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2920	517	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	412	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.7	9.9	10.0	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.9	29.0	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		825			648			260			2	
Approach Delay, s/veh		29.0			19.4			15.3			13.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8				
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			23.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	798	383	580	13	547	1152	582	540	34
Future Volume (veh/h)	31	360	8	798	383	580	13	547	1152	582	540	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	831	399	0	14	570	1200	606	562	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	744	1204	802	33	880	1301	578	1347	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3350	208
Grp Volume(v), veh/h	32	187	196	831	399	0	14	570	1200	606	293	304
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	56	269	281	744	1204	802	33	880	1301	578	704	726
V/C Ratio(X)	0.57	0.70	0.70	1.12	0.33	0.00	0.43	0.65	0.92	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	665	695	744	1928	1126	89	1011	1404	578	713	736
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	46.8	46.8	45.9	28.4	0.0	57.2	39.5	9.5	48.9	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.5	69.8	0.3	0.0	3.2	1.2	9.9	50.7	0.4	0.4
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	1.1	6.3	6.6	19.2	4.8	0.0	0.5	8.5	9.3	13.4	6.9	7.2
LnGrp Delay(d),s/veh	59.6	53.6	53.4	115.8	28.7	0.0	60.4	40.7	19.4	99.6	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1230			1784			1203	
Approach Delay, s/veh		54.0			87.5			26.5			62.9	
Approach LOS		D			F			C			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	32.0	24.3	8.2	53.4	9.4	46.9	26.0	35.6				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.2	4.2	12.0	22.0	22.0				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.3				
Intersection Summary												
HCM 2010 Ctrl Delay			54.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	117	12	191	223	1421	18	231	1027	44
Future Volume (veh/h)	99	32	232	117	12	191	223	1421	18	231	1027	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	118	12	193	225	1435	18	233	1037	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	251	26	244	238	1493	19	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1617	164	1571	1774	5176	65	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	130	0	193	225	940	513	233	1037	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.96	0.96	0.98	1.02	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.0	34.0	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.2	0.0	5.7	43.8	20.0	29.3	52.8	32.2	0.1
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	1.6	1.9	7.5	3.2	0.0	5.4	8.9	15.1	17.9	9.7	18.2	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	37.9	0.0	45.2	85.6	54.0	63.3	94.8	66.8	25.4
LnGrp LOS	C	C	E	D		D	F	D	E	F	F	C
Approach Vol, veh/h		380			323			1678			1314	
Approach Delay, s/veh		48.5			42.3			61.1			70.4	
Approach LOS		D			D			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.5				
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			61.4									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	375	139	143	315	260	183	1353	144	195	870	173
Future Volume (veh/h)	250	375	139	143	315	260	183	1353	144	195	870	173
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	391	145	149	328	0	191	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	391	145	149	328	0	191	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
V/C Ratio(X)	0.94	1.02	0.46	0.96	0.83	0.00	0.85	1.02	0.25	0.98	0.67	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1344	601
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.3	40.9	33.8	0.0	38.4	27.4	18.5	39.6	23.3	0.0
Incr Delay (d2), s/veh	39.4	51.5	1.0	59.1	13.3	0.0	22.7	29.6	0.2	56.9	1.3	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	4.7	14.9	3.3	6.2	9.2	0.0	6.0	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	87.2	32.4	100.0	47.1	0.0	61.2	57.0	18.7	96.5	24.6	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		796			477			1750			1109	
Approach Delay, s/veh		75.1			63.6			54.2			37.8	
Approach LOS		E			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	15.0	39.6	12.4	23.0	15.9	38.7	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.5	21.2	8.8	17.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			54.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Ag PM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	787	298	399	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	787	298	399	427	0	88	0	74	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	828	314	420	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	801	303	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2417	915	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	583	559	420	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1629	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	18.9	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	18.9	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	540	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.03	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	540	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	46.7	48.4	28.5	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.7	19.1	12.6	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	73.5	75.1	57.7	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1143			869			171			3	
Approach Delay, s/veh		74.3			32.0			25.8			22.9	
Approach LOS		E			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		24.0	25.0	31.0		24.0	4.6	51.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.8	20.9	28.5		2.1	2.0	6.9				
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			53.6									
HCM 2010 LOS			D									

Appendix L

Level of Service

Calculations

Background Plus Project

Apartments

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Background Plus Project Apts AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	234	892	1112	19	23	475
Future Volume (vph)	234	892	1112	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	223	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	257	980	1222	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	257	980	1243	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	306	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.84	0.41	0.66		0.06	0.95
Uniform Delay, d1	16.0	6.2	14.8		26.5	33.5
Progression Factor	1.75	0.38	1.00		1.00	1.00
Incremental Delay, d2	16.7	0.1	1.0		0.0	33.5
Delay (s)	44.7	2.5	15.8		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		11.3	15.8		65.2	
Approach LOS		B	B		E	
Intersection Summary						
HCM 2000 Control Delay			22.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.91			
Actuated Cycle Length (s)			89.8		Sum of lost time (s)	11.6
Intersection Capacity Utilization			67.4%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	965	0	0	1315	272	313	1	162	0	0	0
Future Volume (vph)	0	965	0	0	1315	272	313	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1060	0	0	1445	299	344	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	108	0	0	0
Lane Group Flow (vph)	0	1060	0	0	1744	0	172	173	70	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.31			c0.51		0.11	c0.11				
v/s Ratio Perm									0.05			
v/c Ratio		0.45			0.95		0.45	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.4			
Progression Factor		1.00			0.68		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.2		0.8	0.8	0.3			
Delay (s)		6.6			21.6		30.1	30.1	27.7			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.6			29.2			0.0	
Approach LOS		A			C			C			A	
Intersection Summary												
HCM 2000 Control Delay			18.0			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			89.8			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			60.4%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background Plus Project Apts AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1062	1347	0	231	399		
Future Volume (veh/h)	0	1062	1347	0	231	399		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1167	1480	0	254	438		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1713	1747	0	1152	530		
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1167	1480	0	254	438		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	13.1	18.6	0.0	2.7	13.2		
Cycle Q Clear(g_c), s	0.0	13.1	18.6	0.0	2.7	13.2		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1713	1747	0	1152	530		
V/C Ratio(X)	0.00	0.68	0.85	0.00	0.22	0.83		
Avail Cap(c_a), veh/h	0	2091	2132	0	1408	648		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.5	10.9	0.0	11.7	15.1		
Incr Delay (d2), s/veh	0.0	0.4	2.4	0.0	0.1	6.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.1	9.4	0.0	1.2	6.5		
LnGrp Delay(d),s/veh	0.0	10.0	13.3	0.0	11.7	21.9		
LnGrp LOS		A	B		B	C		
Approach Vol, veh/h		1167	1480		692			
Approach Delay, s/veh		10.0	13.3		18.2			
Approach LOS		A	B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.4		21.1		29.4		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.1		15.2		20.6		
Green Ext Time (p_c), s		3.4		1.3		3.7		
Intersection Summary								
HCM 2010 Ctrl Delay			13.2					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary 4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Future Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
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		0.99	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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1009	522	0	27	335	987	211	334	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	487	16	1162	1585	837	55	662	1460	276	762	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	319
Grp Volume(v), veh/h	34	169	177	1009	522	0	27	335	987	211	181	187
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.8	9.8	28.2	9.7	0.0	1.5	8.7	8.2	6.2	9.0	9.1
Cycle Q Clear(g_c), s	2.0	9.8	9.8	28.2	9.7	0.0	1.5	8.7	8.2	6.2	9.0	9.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	246	256	1162	1585	837	55	662	1460	276	416	424
V/C Ratio(X)	0.56	0.69	0.69	0.87	0.33	0.00	0.49	0.51	0.68	0.76	0.44	0.44
Avail Cap(c_a), veh/h	120	751	782	1239	2597	1290	104	1199	1880	299	645	657
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	40.6	40.6	30.9	17.5	0.0	48.0	36.5	4.9	45.2	32.4	32.3
Incr Delay (d2), s/veh	3.0	7.1	6.9	7.3	0.3	0.0	2.5	0.6	0.7	12.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.2	14.2	4.7	0.0	0.8	4.2	4.2	3.4	4.4	4.5
LnGrp Delay(d),s/veh	50.7	47.7	47.5	38.2	17.8	0.0	50.5	37.1	5.5	58.1	33.1	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1531			1349			579	
Approach Delay, s/veh		47.9			31.2			14.3			42.2	
Approach LOS		D			C			B			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	40.7	20.5	9.2	30.4	9.2	52.0	14.3	25.2				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	30.2	11.8	3.5	11.1	4.0	11.7	8.2	10.7				
Green Ext Time (p_c), s	4.5	3.2	0.0	1.4	0.0	6.1	0.1	7.9				
Intersection Summary												
HCM 2010 Ctrl Delay			28.6									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background Plus Project Apts AM

Intersection

Int Delay, s/veh 38.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Future Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	72	11	108	194	1202	16	142	1137	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1674	22	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1534	234	1563	1757	5122	68	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	83	0	108	194	788	430	142	1137	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.2	0.0	6.3	10.0	19.4	19.4	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.2	0.0	6.3	10.0	19.4	19.4	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.72	0.72	0.82	1.01	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.9	27.9	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.1	0.0	6.0	76.8	2.3	4.1	19.0	28.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	9.3	10.5	4.5	19.1	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.7	0.0	47.2	118.9	30.2	32.0	60.7	61.0	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	F	C
Approach Vol, veh/h		441			191			1412			1302	
Approach Delay, s/veh		95.6			44.8			42.9			60.2	
Approach LOS		F			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	21.4				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			56.7									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1	25	655	3	143	8	1010	535	227	1276	10
Future Volume (veh/h)	34	1	25	655	3	143	8	1010	535	227	1276	10
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	36	1	27	697	3	152	9	1074	569	241	1357	11
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	51	3	85	769	466	396	16	1347	603	198	1725	14
Arrive On Green	0.03	0.06	0.06	0.23	0.25	0.25	0.01	0.38	0.38	0.11	0.48	0.48
Sat Flow, veh/h	1774	57	1535	3408	1845	1568	1774	3539	1583	1757	3563	29
Grp Volume(v), veh/h	36	0	28	697	3	152	9	1074	569	241	667	701
Grp Sat Flow(s),veh/h/ln	1774	0	1592	1704	1845	1568	1774	1770	1583	1757	1752	1840
Q Serve(g_s), s	1.4	0.0	1.2	14.1	0.1	5.7	0.4	19.1	24.7	8.0	22.5	22.5
Cycle Q Clear(g_c), s	1.4	0.0	1.2	14.1	0.1	5.7	0.4	19.1	24.7	8.0	22.5	22.5
Prop In Lane	1.00		0.96	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	51	0	89	769	466	396	16	1347	603	198	848	891
V/C Ratio(X)	0.71	0.00	0.32	0.91	0.01	0.38	0.55	0.80	0.94	1.22	0.79	0.79
Avail Cap(c_a), veh/h	100	0	90	769	466	396	100	1347	603	198	848	891
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(l)	1.00	0.00	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	0.0	32.2	26.7	19.9	21.9	35.0	19.5	21.2	31.5	15.2	15.2
Incr Delay (d2), s/veh	16.5	0.0	2.0	14.5	0.0	0.6	26.2	5.0	25.2	134.4	7.3	7.0
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	0.9	0.0	0.6	8.1	0.0	2.5	0.3	10.2	15.0	11.3	12.5	13.0
LnGrp Delay(d),s/veh	50.7	0.0	34.2	41.2	19.9	22.6	61.2	24.5	46.5	165.9	22.5	22.2
LnGrp LOS	D		C	D	B	C	E	C	D	F	C	C
Approach Vol, veh/h		64			852			1652			1609	
Approach Delay, s/veh		43.5			37.8			32.3			43.9	
Approach LOS		D			D			C			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	12.0	31.0	20.0	7.9	4.7	38.3	6.0	21.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+l1), s	10.0	26.7	16.1	3.2	2.4	24.5	3.4	7.7				
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.3	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			38.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Future Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.6	0.0	7.3	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.6	0.0	7.3	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.06	1.03	0.97	0.84	0.00	0.96	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.7	0.0	41.1	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	62.5	58.9	55.8	13.0	0.0	61.7	0.6	0.1	11.3	29.9	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	3.2	16.5	13.4	7.3	11.2	0.0	6.1	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	98.1	94.5	95.9	44.7	0.0	102.7	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		930			580			962			1619	
Approach Delay, s/veh		92.9			60.5			35.0			56.2	
Approach LOS		F			E			C			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	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.3	38.0	6.6	20.6				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			60.1									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	498	156	108	378	3	176	0	192	7	2	0
Future Volume (veh/h)	0	498	156	108	378	3	176	0	192	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	607	190	132	461	4	215	0	234	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	754	236	166	1579	14	653	0	556	381	73	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2580	806	1630	3304	29	1465	0	1568	730	206	0
Grp Volume(v), veh/h	0	404	393	132	227	238	215	0	234	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1465	0	1568	936	0	0
Q Serve(g_s), s	0.0	11.7	11.7	4.2	4.5	4.5	0.0	0.0	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.7	11.7	4.2	4.5	4.5	5.2	0.0	6.1	5.2	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	777	815	653	0	556	454	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.33	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	777	815	653	0	556	454	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	23.5	8.5	8.5	12.9	0.0	13.1	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.2	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.4	2.3	2.1	2.2	2.6	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.8	25.1	32.0	8.7	8.7	14.2	0.0	15.5	11.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		797			597			449			11	
Approach Delay, s/veh		24.9			13.8			14.9			11.6	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.9	20.2		23.5	0.0	30.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		8.1	6.2	13.7		7.2	0.0	6.5				
Green Ext Time (p_c), s		1.6	0.1	2.0		0.0	0.0	2.5				
Intersection Summary												
HCM 2010 Ctrl Delay			18.8									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	701	125	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	150	251	1477	10	576	4	488	296	266	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2917	520	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	413	413	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.8	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	495	251	725	762	580	0	488	562	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	151	544	543	295	725	762	580	0	488	562	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.1	0.0	0.0
Incr Delay (d2), s/veh	53.7	10.0	10.1	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.5	7.5	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.1	29.0	29.1	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		827			648			260			2	
Approach Delay, s/veh		29.1			19.5			15.3			13.1	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.8	8.9	14.8		5.1	2.0	6.8				
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			23.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	553	712	32	142	608	262	44	285	77	198	399	644
Future Volume (veh/h)	553	712	32	142	608	262	44	285	77	198	399	644
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	570	734	33	146	627	0	45	294	79	204	411	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	657	173	235	619	526
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2718	718	1757	1845	1568
Grp Volume(v), veh/h	570	376	391	146	627	0	45	186	187	204	411	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	9.0	15.0	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	9.0	15.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	419	411	235	619	526
V/C Ratio(X)	0.90	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.46	0.87	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	794	355	111	419	411	235	619	526
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.4	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.4	22.4	0.0
Incr Delay (d2), s/veh	15.7	5.1	4.9	18.3	8.5	0.0	9.8	3.4	3.6	27.7	5.6	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	7.4	8.1	8.3	4.0	7.4	0.0	1.2	3.8	3.8	6.2	8.6	0.0
LnGrp Delay(d),s/veh	47.0	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	61.1	27.9	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1337			773			418			615	
Approach Delay, s/veh		37.3			41.0			30.8			38.9	
Approach LOS		D			D			C			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	15.0	23.5	12.6	27.5	7.6	30.9	19.0	21.1				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	11.0	9.4	8.5	17.0	4.0	17.0	14.7	15.7				
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			37.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	120	422	107	319	322	283	35	449	383	230	593	91
Future Volume (veh/h)	120	422	107	319	322	283	35	449	383	230	593	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	138	485	123	367	370	325	40	516	440	264	682	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	755	288	394	629	530	66	817	377	327	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	138	485	123	367	370	325	40	516	440	264	682	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	6.0	9.8	6.2	16.0	12.9	13.6	1.8	10.7	19.0	5.9	8.6	4.0
Cycle Q Clear(g_c), s	6.0	9.8	6.2	16.0	12.9	13.6	1.8	10.7	19.0	5.9	8.6	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	755	288	394	629	530	66	817	377	327	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.17	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	629	530	133	817	377	327	1522	469
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	28.3	26.8	30.1	21.6	21.8	37.4	26.8	29.9	34.9	22.4	20.7
Incr Delay (d2), s/veh	11.1	1.6	1.0	28.8	1.4	2.1	8.8	3.7	99.7	13.7	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.9	2.4	11.0	6.8	6.2	1.0	5.4	18.5	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.9	29.8	27.8	58.8	23.0	23.9	46.2	30.5	129.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		746			1062			996			1051	
Approach Delay, s/veh		32.5			35.7			74.9			29.5	
Approach LOS		C			D			E			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	12.0	23.5	22.0	21.3	7.4	28.1	12.2	31.1				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.9	21.0	18.0	11.8	3.8	10.6	8.0	15.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			43.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary 13: N Main St & W Laurel Dr/E Laurel Dr

Background Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	432	105	145	603	97	78	537	123	211	810	176
Future Volume (veh/h)	197	432	105	145	603	97	78	537	123	211	810	176
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	221	485	118	163	678	109	88	603	138	237	910	198
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	776	188	202	769	124	200	958	424	272	1228	266
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2822	682	1774	3051	490	3408	3505	1551	3442	4183	906
Grp Volume(v), veh/h	221	303	300	163	393	394	88	603	138	237	737	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1700
Q Serve(g_s), s	8.5	10.4	10.5	6.2	14.8	14.9	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.5	10.4	10.5	6.2	14.8	14.9	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	487	477	202	446	447	200	958	424	272	995	499
V/C Ratio(X)	0.91	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	487	477	227	458	459	245	958	424	272	995	499
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	29.6	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.2	31.7	22.2	22.2
Incr Delay (d2), s/veh	35.1	2.5	2.6	17.4	17.5	17.7	1.5	3.1	2.0	24.8	4.9	9.7
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	6.5	5.4	5.3	4.0	9.4	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	64.7	24.5	24.7	47.5	42.5	42.7	33.1	25.3	22.2	56.5	27.1	31.9
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		824			950			829			1345	
Approach Delay, s/veh		35.4			43.4			25.6			33.6	
Approach LOS		D			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	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.5	16.9				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			34.7									
HCM 2010 LOS			C									

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Background Plus Project Apts PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	488	1482	974	33	41	343
Future Volume (vph)	488	1482	974	33	41	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	268	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	493	1497	984	33	41	346
RTOR Reduction (vph)	0	0	0	0	0	262
Lane Group Flow (vph)	493	1497	1017	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	39.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	40.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	463	2394	1561		422	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.52					c0.05
v/c Ratio	1.06	0.63	0.65		0.10	0.22
Uniform Delay, d1	22.7	7.9	19.3		26.7	27.2
Progression Factor	1.14	0.55	1.00		1.00	1.00
Incremental Delay, d2	51.8	0.4	1.1		0.1	0.2
Delay (s)	77.6	4.7	20.4		26.8	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		22.7	20.4		27.4	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			22.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.87			
Actuated Cycle Length (s)			90.0		Sum of lost time (s)	11.6
Intersection Capacity Utilization			70.8%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1578	0	0	1065	252	467	3	393	0	0	0
Future Volume (vph)	0	1578	0	0	1065	252	467	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1679	0	0	1133	268	497	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1679	0	0	1401	0	248	252	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			39.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			40.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2382			1515		395	396	372			
v/s Ratio Prot		c0.48			c0.42		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.63	0.64	0.97			
Uniform Delay, d1		8.7			23.3		30.7	30.7	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			8.4		3.1	3.3	38.6			
Delay (s)		9.7			18.8		33.8	34.1	72.6			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.8			51.5			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			22.5			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			74.6%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Background Plus Project Apts PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1585	1381	0	427	406		
Future Volume (veh/h)	0	1585	1381	0	427	406		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1651	1439	0	445	423		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1883	1883	0	1082	498		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1651	1439	0	445	423		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	22.6	17.7	0.0	5.6	13.9		
Cycle Q Clear(g_c), s	0.0	22.6	17.7	0.0	5.6	13.9		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1883	1883	0	1082	498		
V/C Ratio(X)	0.00	0.88	0.76	0.00	0.41	0.85		
Avail Cap(c_a), veh/h	0	2159	2159	0	1140	524		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	11.0	9.9	0.0	14.6	17.4		
Incr Delay (d2), s/veh	0.0	3.6	1.2	0.0	0.2	11.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.5	8.7	0.0	2.6	7.5		
LnGrp Delay(d),s/veh	0.0	14.6	11.0	0.0	14.8	29.2		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1651	1439		868			
Approach Delay, s/veh		14.6	11.0		21.8			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.7		21.1		33.7		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.6		15.9		19.7		
Green Ext Time (p_c), s		3.9		0.6		4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			14.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Future Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	858	399	0	14	572	1216	606	567	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	537	11	742	1201	800	33	886	1305	576	1352	83
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3352	207
Grp Volume(v), veh/h	32	187	196	858	399	0	14	572	1216	606	296	306
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.5	20.0	14.3	14.4
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.5	20.0	14.3	14.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	268	280	742	1201	800	33	886	1305	576	707	729
V/C Ratio(X)	0.57	0.70	0.70	1.16	0.33	0.00	0.43	0.65	0.93	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	663	693	742	1922	1123	89	1008	1400	576	711	734
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	47.0	47.0	46.1	28.6	0.0	57.4	39.4	9.6	49.1	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.6	85.2	0.3	0.0	3.2	1.2	11.0	51.7	0.4	0.4
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	1.1	6.3	6.6	20.8	4.9	0.0	0.5	8.5	9.6	13.5	7.0	7.2
LnGrp Delay(d),s/veh	59.8	53.8	53.6	131.3	28.9	0.0	60.6	40.6	20.6	100.8	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	C	F	C	C
Approach Vol, veh/h		415			1257			1802			1208	
Approach Delay, s/veh		54.2			98.8			27.3			63.4	
Approach LOS		D			F			C			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	32.0	24.3	8.2	53.7	9.4	46.9	26.0	35.9				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.4	4.2	12.0	22.0	22.5				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.5	0.0	4.4	0.0	7.2				
Intersection Summary												
HCM 2010 Ctrl Delay			58.2									
HCM 2010 LOS			E									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Background Plus Project Apts PM

Intersection

Int Delay, s/veh 9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Future Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	120	12	193	225	1453	19	233	1068	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	252	25	244	238	1492	20	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1620	162	1571	1774	5173	68	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	132	0	193	225	952	520	233	1068	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1850	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.5	0.0	11.5	12.2	27.0	27.0	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.5	0.0	11.5	12.2	27.0	27.0	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.48	0.00	0.79	0.95	0.97	0.97	0.98	1.05	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	404	238	978	534	238	1021	453
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.8	0.0	39.5	41.7	34.2	34.2	41.9	34.6	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.3	0.0	5.7	43.9	22.6	32.3	52.9	41.1	0.1
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	1.6	1.9	7.5	3.3	0.0	5.4	8.9	15.6	18.5	9.7	19.4	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	38.0	0.0	45.1	85.6	56.8	66.5	94.8	75.7	25.4
LnGrp LOS	C	C	E	D		D	F	E	E	F	F	C
Approach Vol, veh/h		380			325			1697			1345	
Approach Delay, s/veh		48.5			42.3			63.6			77.3	
Approach LOS		D			D			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	29.0				
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			65.1									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 				 			 	
Traffic Volume (veh/h)	20	6	15	471	11	248	26	1410	746	158	1113	34
Future Volume (veh/h)	20	6	15	471	11	248	26	1410	746	158	1113	34
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	22	7	16	518	12	273	29	1549	820	174	1223	37
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	30	69	608	403	343	44	1537	687	159	1750	53
Arrive On Green	0.02	0.06	0.06	0.18	0.22	0.22	0.02	0.43	0.43	0.09	0.50	0.50
Sat Flow, veh/h	1774	505	1154	3442	1863	1583	1774	3539	1583	1774	3508	106
Grp Volume(v), veh/h	22	0	23	518	12	273	29	1549	820	174	617	643
Grp Sat Flow(s),veh/h/ln	1774	0	1659	1721	1863	1583	1774	1770	1583	1774	1770	1844
Q Serve(g_s), s	0.8	0.0	0.9	9.7	0.3	10.9	1.1	29.0	29.0	6.0	17.9	17.9
Cycle Q Clear(g_c), s	0.8	0.0	0.9	9.7	0.3	10.9	1.1	29.0	29.0	6.0	17.9	17.9
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	36	0	99	608	403	343	44	1537	687	159	883	920
V/C Ratio(X)	0.62	0.00	0.23	0.85	0.03	0.80	0.66	1.01	1.19	1.09	0.70	0.70
Avail Cap(c_a), veh/h	106	0	199	618	446	379	106	1537	687	159	883	920
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	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	32.5	0.0	29.9	26.6	20.6	24.8	32.3	18.9	18.9	30.4	12.9	12.9
Incr Delay (d2), s/veh	16.1	0.0	1.2	10.9	0.0	10.4	15.3	25.0	100.8	98.0	4.6	4.4
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	0.6	0.0	0.4	5.5	0.2	5.7	0.7	19.2	31.8	7.2	9.7	10.1
LnGrp Delay(d),s/veh	48.6	0.0	31.1	37.5	20.7	35.1	47.6	43.9	119.7	128.4	17.4	17.3
LnGrp LOS	D		C	D	C	D	D	F	F	F	B	B
Approach Vol, veh/h		45			803			2398			1434	
Approach Delay, s/veh		39.7			36.5			69.8			30.8	
Approach LOS		D			D			E			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	10.0	33.0	15.8	8.0	5.7	37.3	5.3	18.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	8.0	31.0	11.7	2.9	3.1	19.9	2.8	12.9				
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	6.0	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			51.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	229	1380	605	207	1336	598
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.5	7.5	15.5	0.0	9.7	35.1	5.9	10.3	19.3	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.5	7.5	15.5	0.0	9.7	35.1	5.9	10.3	19.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	229	1380	605	207	1336	598
V/C Ratio(X)	0.94	1.03	0.46	0.96	0.84	0.00	0.85	1.02	0.25	0.98	0.68	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1336	598
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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.4	40.9	33.9	0.0	38.3	27.4	18.5	39.6	23.4	0.0
Incr Delay (d2), s/veh	39.4	53.6	1.0	59.1	14.8	0.0	23.5	29.6	0.2	56.9	1.4	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	4.7	15.2	3.3	6.2	9.6	0.0	6.2	22.7	2.5	8.3	9.7	0.0
LnGrp Delay(d),s/veh	80.6	89.4	32.4	100.0	48.8	0.0	61.8	57.0	18.7	96.5	24.8	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		801			483			1754			1109	
Approach Delay, s/veh		76.1			64.6			54.3			37.9	
Approach LOS		E			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	15.0	39.6	12.4	23.0	16.1	38.5	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.7	21.3	8.8	17.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			55.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	901	160	98	413	4	98	2	181	5	0	1
Future Volume (veh/h)	0	901	160	98	413	4	98	2	181	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	919	163	100	421	4	100	2	185	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1020	181	125	1729	16	583	10	508	417	11	62
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2865	508	1675	3393	32	1377	31	1524	904	32	187
Grp Volume(v), veh/h	0	541	541	100	207	218	102	0	185	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1754	1408	0	1524	1123	0	0
Q Serve(g_s), s	0.0	17.4	17.4	3.4	4.0	4.0	0.0	0.0	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.4	17.4	3.4	4.0	4.0	2.4	0.0	5.3	2.4	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	601	601	125	852	894	594	0	508	490	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.17	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	615	615	190	852	894	594	0	508	490	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	26.1	7.9	7.9	13.5	0.0	14.5	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	16.1	16.2	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.7	10.7	2.0	1.8	1.9	1.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.6	33.7	38.8	8.0	8.0	14.2	0.0	16.5	12.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1082			525			287			6	
Approach Delay, s/veh		33.7			13.9			15.7			12.9	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.8	24.9		23.6	0.0	33.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		7.3	5.4	19.4		4.4	0.0	6.0				
Green Ext Time (p_c), s		0.9	0.0	1.0		0.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	796	307	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2404	926	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	587	562	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	19.0	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	19.0	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	539	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.04	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	539	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	48.7	50.5	29.0	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	20.0	19.4	12.7	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	75.4	77.2	58.2	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1150			870			171			3	
Approach Delay, s/veh		76.4			32.2			25.8			22.9	
Approach LOS		E			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		24.0	25.0	31.0		24.0	4.6	51.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.8	21.0	28.5		2.1	2.0	6.9				
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			54.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	691	12	86	745	297	37	316	165	248	285	561
Future Volume (veh/h)	521	691	12	86	745	297	37	316	165	248	285	561
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	543	720	12	90	776	0	39	329	172	258	297	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	547	280	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2244	1150	1757	1845	1568
Grp Volume(v), veh/h	543	358	374	90	776	0	39	255	246	258	297	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1642	1757	1845	1568
Q Serve(g_s), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.6	11.5	10.0	0.0
Cycle Q Clear(g_c), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.6	11.5	10.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	1.01	0.63	0.63	0.78	0.96	0.00	0.61	0.60	0.61	1.02	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	23.0	23.0	36.8	30.4	0.0	38.0	26.8	26.9	34.3	20.1	0.0
Incr Delay (d2), s/veh	41.3	2.2	2.1	19.9	21.8	0.0	9.2	6.1	6.9	62.3	2.3	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	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	7.0	7.3	2.6	10.9	0.0	1.0	5.7	5.5	9.9	5.5	0.0
LnGrp Delay(d),s/veh	75.0	25.2	25.1	56.7	52.2	0.0	47.2	32.8	33.8	96.7	22.4	0.0
LnGrp LOS	F	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1275			866			540			555	
Approach Delay, s/veh		46.4			52.6			34.3			56.9	
Approach LOS		D			D			C			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	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	12.6	6.0	15.7	3.8	12.0	14.5	19.5				
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			47.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	238	66	239	238	257	118	1026	260	199	1183	241
Future Volume (veh/h)	214	238	66	239	238	257	118	1026	260	199	1183	241
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		0.97	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	223	248	69	249	248	268	123	1069	271	207	1232	251
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	721	314	292	406	341	156	1201	304	269	1468	447
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4029	1021	3442	5085	1550
Grp Volume(v), veh/h	223	248	69	249	248	268	123	899	441	207	1232	251
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1659	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.6	8.5	11.4	4.8	17.8	17.9	4.2	16.0	9.7
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.6	8.5	11.4	4.8	17.8	17.9	4.2	16.0	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	266	721	314	292	406	341	156	1011	495	269	1468	447
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	302	905	395	315	489	410	164	1011	495	269	1468	447
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	29.1	24.0	23.4	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.3
Incr Delay (d2), s/veh	16.8	0.3	0.3	18.7	1.6	8.2	21.7	11.6	20.8	12.8	5.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	2.1	1.1	6.2	4.5	5.7	3.3	10.0	11.1	2.5	8.2	4.7
LnGrp Delay(d),s/veh	45.9	24.3	23.7	47.3	26.4	34.2	53.2	35.3	44.4	44.6	29.4	26.3
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		540			765			1463			1690	
Approach Delay, s/veh		33.1			35.9			39.5			30.8	
Approach LOS		C			D			D			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	10.0	25.5	16.1	18.8	10.7	24.8	15.1	19.9				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.2	19.9	11.6	6.2	6.8	18.0	10.6	13.4				
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.5	0.1	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			34.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary 13: N Main St & W Laurel Dr/E Laurel Dr

Background Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	674	89	176	547	185	152	968	202	327	919	226
Future Volume (veh/h)	241	674	89	176	547	185	152	968	202	327	919	226
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	246	688	91	180	558	189	155	988	206	334	938	231
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	816	108	193	584	197	230	1062	463	366	1376	338
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3137	415	1774	2595	876	3442	3539	1544	3442	4054	995
Grp Volume(v), veh/h	246	388	391	180	380	367	155	988	206	334	784	385
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1659
Q Serve(g_s), s	11.0	16.6	16.7	8.1	17.0	17.1	3.5	21.7	8.6	7.7	15.9	16.0
Cycle Q Clear(g_c), s	11.0	16.6	16.7	8.1	17.0	17.1	3.5	21.7	8.6	7.7	15.9	16.0
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	563
V/C Ratio(X)	0.96	0.84	0.84	0.93	0.95	0.96	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	563
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	34.0	28.1	28.1	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	46.4	13.3	13.4	46.0	33.4	35.3	7.1	15.3	3.1	26.6	3.3	6.6
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	8.7	9.8	9.9	6.4	11.9	11.7	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	80.5	41.4	41.4	81.4	64.0	65.9	43.6	42.4	25.7	62.0	26.0	29.3
LnGrp LOS	F	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1025			927			1349			1503	
Approach Delay, s/veh		50.8			68.1			40.0			34.8	
Approach LOS		D			E			D			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	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.7	5.5	18.0	13.0	19.1				
Green Ext Time (p_c), s	0.0	0.2	0.0	1.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			46.1									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 					 	 		
Traffic Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Future Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1009	522	0	27	335	987	211	334	34
Adj No. of Lanes	1	2	0	3	1	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	64	512	17	1344	716	743	58	732	1322	291	835	84
Arrive On Green	0.04	0.16	0.17	0.27	0.39	0.00	0.03	0.21	0.21	0.09	0.26	0.28
Sat Flow, veh/h	1659	3270	107	4905	1826	1552	1739	3470	2719	3342	3152	319
Grp Volume(v), veh/h	34	169	177	1009	522	0	27	335	987	211	181	187
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1635	1826	1552	1739	1735	1360	1671	1718	1752
Q Serve(g_s), s	1.7	8.3	8.4	16.3	21.1	0.0	1.3	7.3	7.7	5.3	7.5	7.6
Cycle Q Clear(g_c), s	1.7	8.3	8.4	16.3	21.1	0.0	1.3	7.3	7.7	5.3	7.5	7.6
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	64	259	270	1344	716	743	58	732	1322	291	455	464
V/C Ratio(X)	0.53	0.65	0.66	0.75	0.73	0.00	0.47	0.46	0.75	0.73	0.40	0.40
Avail Cap(c_a), veh/h	140	873	909	1529	1379	1307	121	1395	1841	347	750	765
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	34.3	34.3	28.7	22.4	0.0	41.1	29.8	4.9	38.5	26.2	26.1
Incr Delay (d2), s/veh	2.5	5.8	5.7	2.5	3.1	0.0	2.2	0.4	1.1	8.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.2	4.4	7.6	11.2	0.0	0.7	3.5	4.0	2.8	3.6	3.8
LnGrp Delay(d),s/veh	43.3	40.1	39.9	31.2	25.5	0.0	43.3	30.3	6.0	47.4	26.7	26.7
LnGrp LOS	D	D	D	C	C		D	C	A	D	C	C
Approach Vol, veh/h		380			1531			1349			579	
Approach Delay, s/veh		40.3			29.3			12.8			34.2	
Approach LOS		D			C			B			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	29.7	19.1	8.9	28.9	8.9	39.9	13.5	24.3				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	27.0	45.7	6.0	37.8	7.3	65.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	18.3	10.4	3.3	9.6	3.7	23.1	7.3	9.7				
Green Ext Time (p_c), s	5.4	3.2	0.0	1.4	0.0	5.9	0.2	8.0				
Intersection Summary												
HCM 2010 Ctrl Delay			25.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Future Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	40	33	367	72	11	108	194	1202	16	142	1137	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	349	492	418	327	43	430	233	1944	26	178	1230	548
Arrive On Green	0.27	0.27	0.27	0.29	0.27	0.27	0.13	0.38	0.38	0.10	0.35	0.35
Sat Flow, veh/h	1219	1792	1522	857	157	1566	1757	5122	68	1774	3539	1578
Grp Volume(v), veh/h	40	33	367	83	0	108	194	788	430	142	1137	23
Grp Sat Flow(s),veh/h/ln	1219	1792	1522	1014	0	1566	1757	1679	1833	1774	1770	1578
Q Serve(g_s), s	2.0	1.0	16.9	4.0	0.0	3.9	7.9	13.9	13.9	5.7	22.6	0.7
Cycle Q Clear(g_c), s	7.0	1.0	16.9	5.0	0.0	3.9	7.9	13.9	13.9	5.7	22.6	0.7
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	349	492	418	391	0	430	233	1274	696	178	1230	548
V/C Ratio(X)	0.11	0.07	0.88	0.21	0.00	0.25	0.83	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	447	636	540	474	0	556	240	1274	696	218	1255	560
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	19.7	25.4	20.7	0.0	20.7	31.0	18.4	18.4	32.2	23.0	15.8
Incr Delay (d2), s/veh	0.1	0.1	12.6	0.3	0.0	0.3	21.2	0.9	1.7	15.4	11.4	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	0.7	0.5	8.5	1.3	0.0	1.7	5.2	6.6	7.4	3.6	13.0	0.3
LnGrp Delay(d),s/veh	24.0	19.7	38.0	21.0	0.0	21.0	52.2	19.3	20.1	47.7	34.4	15.9
LnGrp LOS	C	B	D	C		C	D	B	C	D	C	B
Approach Vol, veh/h		440			191			1412			1302	
Approach Delay, s/veh		35.4			21.0			24.1			35.5	
Approach LOS		D			C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		26.1	15.7	31.5		26.1	13.4	33.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		26.0	10.0	26.0		26.0	9.0	27.0				
Max Q Clear Time (g_c+I1), s		18.9	9.9	24.6		7.0	7.7	15.9				
Green Ext Time (p_c), s		1.2	0.0	0.8		0.8	0.1	4.4				
Intersection Summary												
HCM 2010 Ctrl Delay			29.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Future Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
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		0.99	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	249	449	376	209	531	451	171	1503	142	208	1724	0
Arrive On Green	0.07	0.24	0.24	0.12	0.29	0.00	0.10	0.32	0.32	0.12	0.34	0.00
Sat Flow, veh/h	3442	1863	1560	1757	1845	1568	1774	4723	446	1774	5253	0
Grp Volume(v), veh/h	177	415	338	179	401	0	144	535	283	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1560	1757	1845	1568	1774	1695	1779	1774	1695	0
Q Serve(g_s), s	4.4	19.2	18.5	8.8	17.4	0.0	7.0	11.3	11.4	8.3	23.2	0.0
Cycle Q Clear(g_c), s	4.4	19.2	18.5	8.8	17.4	0.0	7.0	11.3	11.4	8.3	23.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.00
Lane Grp Cap(c), veh/h	249	449	376	209	531	451	171	1079	566	208	1724	0
V/C Ratio(X)	0.71	0.92	0.90	0.85	0.76	0.00	0.84	0.50	0.50	0.82	0.84	0.00
Avail Cap(c_a), veh/h	270	450	377	209	531	451	171	1079	566	320	1830	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	32.7	32.4	38.1	28.5	0.0	39.1	24.3	24.4	38.0	26.9	0.0
Incr Delay (d2), s/veh	7.8	24.9	23.6	27.5	6.1	0.0	29.6	0.4	0.7	9.6	3.5	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	2.4	12.9	10.4	5.9	9.7	0.0	4.8	5.3	5.7	4.6	11.4	0.0
LnGrp Delay(d),s/veh	47.7	57.5	56.0	65.6	34.7	0.0	68.7	24.7	25.0	47.5	30.4	0.0
LnGrp LOS	D	E	E	E	C		E	C	C	D	C	
Approach Vol, veh/h		930			580			962			1619	
Approach Delay, s/veh		55.1			44.2			31.4			32.2	
Approach LOS		E			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	14.8	32.5	15.0	25.7	13.0	34.4	10.9	29.9				
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	15.9	24.3	10.5	21.3	8.5	31.7	6.9	24.9				
Max Q Clear Time (g_c+I1), s	10.3	13.4	10.8	21.2	9.0	25.2	6.4	19.4				
Green Ext Time (p_c), s	0.2	4.0	0.0	0.1	0.0	4.7	0.0	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			38.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Apts AM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
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	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	701	125	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	925	414	252	1415	10	594	4	504	308	277	0
Arrive On Green	0.00	0.27	0.27	0.15	0.42	0.42	0.33	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3372	23	1390	13	1509	628	830	0
Grp Volume(v), veh/h	1	701	125	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1739	1403	0	1509	1458	0	0
Q Serve(g_s), s	0.0	10.3	3.6	6.7	4.8	4.8	0.0	0.0	3.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.3	3.6	6.7	4.8	4.8	3.0	0.0	3.6	3.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	925	414	252	695	730	599	0	504	585	0	0
V/C Ratio(X)	0.32	0.76	0.30	0.82	0.31	0.31	0.21	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	156	1123	502	304	695	730	599	0	504	585	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.5	18.5	16.0	22.6	10.7	10.7	13.2	0.0	13.4	12.2	0.0	0.0
Incr Delay (d2), s/veh	50.2	2.4	0.4	13.9	0.3	0.2	0.8	0.0	1.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.2	1.5	4.0	2.2	2.3	1.5	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	77.7	20.9	16.4	36.5	10.9	10.9	14.0	0.0	14.7	12.3	0.0	0.0
LnGrp LOS	E	C	B	D	B	B	B		B	B		
Approach Vol, veh/h		827			648			260			2	
Approach Delay, s/veh		20.3			19.1			14.4			12.3	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	12.9	19.3		22.9	4.6	27.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.6	8.7	12.3		5.0	2.0	6.8				
Green Ext Time (p_c), s		0.9	0.1	2.5		0.0	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			19.0									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Background Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Future Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	858	399	0	14	572	1216	606	567	35
Adj No. of Lanes	1	2	0	3	1	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	913	571	785	33	920	1238	658	1465	90
Arrive On Green	0.03	0.16	0.17	0.19	0.31	0.00	0.02	0.26	0.26	0.19	0.44	0.45
Sat Flow, veh/h	1690	3375	72	4905	1826	1552	1756	3504	2759	3407	3352	207
Grp Volume(v), veh/h	32	187	196	858	399	0	14	572	1216	606	296	306
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1635	1826	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	20.4	22.7	0.0	0.9	17.0	22.7	20.6	13.5	13.6
Cycle Q Clear(g_c), s	2.2	12.4	12.4	20.4	22.7	0.0	0.9	17.0	22.7	20.6	13.5	13.6
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	269	281	913	571	785	33	920	1238	658	765	790
V/C Ratio(X)	0.57	0.70	0.70	0.94	0.70	0.00	0.43	0.62	0.98	0.92	0.39	0.39
Avail Cap(c_a), veh/h	103	678	708	913	963	1118	89	1008	1307	663	765	790
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	47.0	47.0	47.4	35.7	0.0	57.4	38.4	10.8	46.8	22.5	22.5
Incr Delay (d2), s/veh	3.4	6.8	6.5	17.5	3.3	0.0	3.2	1.0	20.3	18.9	0.3	0.3
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	1.1	6.3	6.6	10.7	11.9	0.0	0.5	8.4	11.9	11.4	6.6	6.8
LnGrp Delay(d),s/veh	59.7	53.7	53.5	64.9	39.0	0.0	60.6	39.4	31.1	65.7	22.9	22.8
LnGrp LOS	E	D	D	E	D		E	D	C	E	C	C
Approach Vol, veh/h		415			1257			1802			1208	
Approach Delay, s/veh		54.1			56.7			34.0			44.3	
Approach LOS		D			E			C			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	28.0	24.3	8.2	57.6	9.4	42.9	28.8	37.0				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	22.0	47.5	6.0	51.0	7.2	62.3	23.0	34.0				
Max Q Clear Time (g_c+I1), s	22.4	14.4	2.9	15.6	4.2	24.7	22.6	24.7				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.5	0.0	4.1	0.2	6.1				
Intersection Summary												
HCM 2010 Ctrl Delay			44.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Background Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Future Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	100	32	234	120	12	193	225	1453	19	233	1068	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	444	375	339	29	379	268	1757	23	276	1217	541
Arrive On Green	0.24	0.24	0.24	0.26	0.24	0.24	0.15	0.34	0.34	0.16	0.34	0.34
Sat Flow, veh/h	1157	1845	1558	990	120	1575	1774	5173	68	1774	3539	1574
Grp Volume(v), veh/h	100	32	234	132	0	193	225	952	520	233	1068	44
Grp Sat Flow(s),veh/h/ln	1157	1845	1558	1109	0	1575	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	5.6	0.9	9.1	6.3	0.0	7.2	8.4	17.6	17.6	8.7	19.3	1.3
Cycle Q Clear(g_c), s	12.8	0.9	9.1	7.2	0.0	7.2	8.4	17.6	17.6	8.7	19.3	1.3
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	262	444	375	392	0	379	268	1151	628	276	1217	541
V/C Ratio(X)	0.38	0.07	0.62	0.34	0.00	0.51	0.84	0.83	0.83	0.84	0.88	0.08
Avail Cap(c_a), veh/h	425	704	595	554	0	601	287	1244	679	287	1299	578
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	20.0	23.1	22.0	0.0	22.4	28.1	20.7	20.7	28.0	21.0	15.1
Incr Delay (d2), s/veh	0.9	0.1	1.7	0.5	0.0	1.1	18.4	4.5	7.9	19.6	6.8	0.1
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	1.8	0.5	4.1	2.1	0.0	3.3	5.5	8.9	10.3	5.8	10.5	0.6
LnGrp Delay(d),s/veh	28.8	20.1	24.8	22.5	0.0	23.4	46.5	25.1	28.5	47.5	27.8	15.1
LnGrp LOS	C	C	C	C		C	D	C	C	D	C	B
Approach Vol, veh/h		366			325			1697			1345	
Approach Delay, s/veh		25.5			23.1			29.0			30.8	
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		22.4	16.3	29.4		22.4	16.6	29.1				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		26.0	11.0	25.0		26.0	11.0	25.0				
Max Q Clear Time (g_c+I1), s		14.8	10.4	21.3		9.2	10.7	19.6				
Green Ext Time (p_c), s		1.3	0.1	1.9		1.4	0.0	3.2				
Intersection Summary												
HCM 2010 Ctrl Delay			28.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Background Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	427	356	177	448	381	231	1580	168	231	1725	0
Arrive On Green	0.09	0.23	0.23	0.10	0.24	0.00	0.13	0.34	0.34	0.13	0.34	0.00
Sat Flow, veh/h	3442	1863	1552	1774	1863	1583	1774	4656	496	1774	5253	0
Grp Volume(v), veh/h	260	394	147	149	334	0	195	1026	533	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1552	1774	1863	1583	1774	1695	1761	1774	1695	0
Q Serve(g_s), s	6.6	18.5	7.2	7.4	14.8	0.0	9.6	25.6	25.6	10.0	12.8	0.0
Cycle Q Clear(g_c), s	6.6	18.5	7.2	7.4	14.8	0.0	9.6	25.6	25.6	10.0	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	305	427	356	177	448	381	231	1151	598	231	1725	0
V/C Ratio(X)	0.85	0.92	0.41	0.84	0.75	0.00	0.85	0.89	0.89	0.88	0.53	0.00
Avail Cap(c_a), veh/h	305	428	356	177	449	381	272	1177	612	231	1725	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.1	33.6	29.3	39.5	31.4	0.0	38.0	27.9	27.9	38.2	23.7	0.0
Incr Delay (d2), s/veh	20.3	25.4	0.8	29.0	6.7	0.0	18.7	8.7	15.1	30.0	0.3	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	4.0	12.4	3.2	5.0	8.4	0.0	5.9	13.4	15.0	6.8	6.0	0.0
LnGrp Delay(d),s/veh	60.4	59.0	30.0	68.5	38.0	0.0	56.6	36.7	43.1	68.2	24.0	0.0
LnGrp LOS	E	E	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		801			483			1754			1109	
Approach Delay, s/veh		54.2			47.4			40.8			32.1	
Approach LOS		D			D			D			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	16.1	34.8	13.4	25.0	16.1	34.8	12.4	26.0				
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	11.6	31.0	8.9	20.5	13.7	28.9	7.9	21.5				
Max Q Clear Time (g_c+I1), s	12.0	27.6	9.4	20.5	11.6	14.8	8.6	16.8				
Green Ext Time (p_c), s	0.0	2.7	0.0	0.0	0.1	5.4	0.0	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			41.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Background Plus Project Apts PM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
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	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	1031	461	458	1959	0	425	0	373	0	478	0
Arrive On Green	0.00	0.30	0.30	0.26	0.56	0.00	0.26	0.00	0.26	0.00	0.26	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	17.0	14.1	17.9	4.9	0.0	4.4	0.0	3.2	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	17.0	14.1	17.9	4.9	0.0	4.5	0.0	3.2	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	1031	461	458	1959	0	425	0	373	0	478	0
V/C Ratio(X)	0.43	0.80	0.69	0.92	0.23	0.00	0.22	0.00	0.21	0.00	0.01	0.00
Avail Cap(c_a), veh/h	112	1188	530	469	1959	0	425	0	373	0	478	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	24.4	23.4	27.2	8.3	0.0	22.7	0.0	22.2	0.0	21.0	0.0
Incr Delay (d2), s/veh	91.0	3.6	3.3	23.1	0.1	0.0	1.2	0.0	1.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	8.5	6.3	11.5	2.3	0.0	1.7	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	129.0	28.0	26.7	50.4	8.3	0.0	23.9	0.0	23.5	0.0	21.1	0.0
LnGrp LOS	F	C	C	D	A		C		C		C	
Approach Vol, veh/h		1150			870			171			3	
Approach Delay, s/veh		27.7			28.7			23.7			21.1	
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		24.0	24.5	27.5		24.0	4.6	47.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		6.5	19.9	19.0		2.1	2.0	6.9				
Green Ext Time (p_c), s		0.5	0.1	4.0		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			27.8									
HCM 2010 LOS			C									

Appendix M

Level of Service

Calculations

Cumulative Without Project

Conditions

HCM Signalized Intersection Capacity Analysis

Cumulative Without Project AM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	210	885	1138	20	30	600
Future Volume (vph)	210	885	1138	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	215	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	962	1237	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	228	962	1259	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	301	2394	1873		422	385
v/s Ratio Prot	c0.08	0.27	0.36		0.02	
v/s Ratio Perm	c0.44					c0.31
v/c Ratio	0.76	0.40	0.67		0.08	1.29
Uniform Delay, d1	14.0	6.2	15.0		26.6	34.0
Progression Factor	1.82	0.33	1.00		1.00	1.00
Incremental Delay, d2	9.6	0.1	1.1		0.1	147.4
Delay (s)	35.0	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		8.5	16.1		174.0	
Approach LOS		A	B		F	
Intersection Summary						
HCM 2000 Control Delay			47.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.94			
Actuated Cycle Length (s)			90.0		Sum of lost time (s)	11.6
Intersection Capacity Utilization			75.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Future Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1052	0	0	1558	332	272	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1052	0	0	1890	0	136	136	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.30			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.03		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.78		1.00	1.00	1.00			
Incremental Delay, d2		0.2			24.4		0.6	0.6	0.1			
Delay (s)		6.7			40.5		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			40.5			28.2			0.0	
Approach LOS		A			D			C			A	
Intersection Summary												
HCM 2000 Control Delay			28.4			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			62.9%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Without Project AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1045	1355	0	263	440		
Future Volume (veh/h)	0	1045	1355	0	263	440		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1136	1473	0	286	478		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1683	1716	0	1208	556		
Arrive On Green	0.00	0.49	0.49	0.00	0.36	0.36		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1136	1473	0	286	478		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	13.5	19.8	0.0	3.2	15.4		
Cycle Q Clear(g_c), s	0.0	13.5	19.8	0.0	3.2	15.4		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1683	1716	0	1208	556		
V/C Ratio(X)	0.00	0.68	0.86	0.00	0.24	0.86		
Avail Cap(c_a), veh/h	0	1984	2023	0	1336	615		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.3	11.9	0.0	11.8	15.7		
Incr Delay (d2), s/veh	0.0	0.5	3.0	0.0	0.1	10.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.4	10.1	0.0	1.5	8.2		
LnGrp Delay(d),s/veh	0.0	10.8	14.9	0.0	11.9	26.4		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1136	1473		764			
Approach Delay, s/veh		10.8	14.9		20.9			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.3		22.9		30.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.5		17.4		21.8		
Green Ext Time (p_c), s		3.3		0.9		3.4		
Intersection Summary								
HCM 2010 Ctrl Delay			14.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary 4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1015	480	320	20	333	965	170	295	20
Future Volume (veh/h)	30	220	20	1015	480	320	20	333	965	170	295	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1080	511	0	21	354	1027	181	314	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1225	1544	807	46	703	1543	251	822	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.20	0.20	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3270	218
Grp Volume(v), veh/h	32	125	130	1080	511	0	21	354	1027	181	164	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Cycle Q Clear(g_c), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	195	199	1225	1544	807	46	703	1543	251	432	445
V/C Ratio(X)	0.54	0.64	0.65	0.88	0.33	0.00	0.45	0.50	0.67	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1283	2689	1320	107	1241	1964	309	668	688
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	41.0	40.9	29.0	17.6	0.0	46.6	34.4	3.8	44.0	30.2	30.1
Incr Delay (d2), s/veh	2.8	7.4	7.5	7.9	0.3	0.0	2.5	0.6	0.6	9.5	0.6	0.5
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	0.9	3.6	3.7	14.8	4.5	0.0	0.6	4.3	3.8	2.7	3.7	3.9
LnGrp Delay(d),s/veh	48.9	48.3	48.4	37.0	17.8	0.0	49.2	35.0	4.4	53.5	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	C	A	D	C	C
Approach Vol, veh/h		287			1591			1402			516	
Approach Delay, s/veh		48.5			30.8			12.8			38.7	
Approach LOS		D			C			B			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	41.3	16.9	8.6	30.4	9.0	49.3	13.3	25.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	31.2	9.1	3.2	9.8	3.8	11.3	7.2	10.8				
Green Ext Time (p_c), s	4.1	2.3	0.0	1.3	0.0	5.9	0.2	8.3				
Intersection Summary												
HCM 2010 Ctrl Delay			26.6									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Cumulative Without Project AM

Intersection												
Int Delay, s/veh	10.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1110	48
Future Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1110	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	70	11	106	257	893	14	140	1181	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	24	155	206	1888	30	174	1241	553
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1528	240	1563	1757	5108	80	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	81	0	106	257	587	320	140	1181	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1830	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.7	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.7	1.9
Prop In Lane	1.00		1.00	0.86		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1241	677	174	1241	553
V/C Ratio(X)	0.22	0.25	0.80	0.46	0.00	0.69	1.25	0.47	0.47	0.80	0.95	0.09
Avail Cap(c_a), veh/h	420	441	374	518	0	458	206	1241	677	229	1244	555
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	34.9	35.7	0.0	37.2	37.7	20.5	20.5	37.7	27.0	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	145.4	0.3	0.5	14.3	15.4	0.1
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	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.3	5.8	3.9	16.1	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.2	37.6	0.0	42.5	183.1	20.8	21.1	52.0	42.4	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			187			1164			1372	
Approach Delay, s/veh		37.6			40.3			56.7			42.5	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.0	16.0	35.9		14.4	14.4	37.5				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		12.0	12.0	29.7		7.6	8.6	13.4				
Green Ext Time (p_c), s		0.9	0.0	0.2		0.6	0.1	3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			47.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	139	412	373	228	120	540	335	163	675	246
Future Volume (veh/h)	301	292	139	412	373	228	120	540	335	163	675	246
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	148	438	397	243	128	574	356	173	718	262
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	328	156	469	415	353	133	973	435	198	786	287
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1194	568	3408	1845	1568	1774	3539	1583	1757	2517	918
Grp Volume(v), veh/h	320	0	459	438	397	243	128	574	356	173	500	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1683
Q Serve(g_s), s	14.3	0.0	20.4	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.4	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.96	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
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	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	32.2	0.0	28.4	34.1	30.6	28.4	36.9	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	28.0	26.1	33.1	5.6	66.2	2.6	15.6	32.6	22.1	22.7
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	10.6	0.0	13.7	6.5	12.4	5.5	5.3	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	56.4	60.3	63.7	34.0	103.0	27.7	42.7	67.5	48.5	49.2
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		779			1078			1058			1153	
Approach Delay, s/veh		62.6			55.6			41.9			51.6	
Approach LOS		E			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	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0				
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.4	7.8	24.0	16.3	19.0				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			52.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.94	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	27.8	0.0	150.2	0.8	0.1	8.2	38.8	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	3.7	18.2	7.9	5.2	14.5	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	60.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			605			1091			1634	
Approach Delay, s/veh		90.0			62.3			51.2			64.2	
Approach LOS		F			E			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	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.5				
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			66.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	673	128	88	534	3	139	0	157	7	2	0
Future Volume (veh/h)	0	673	128	88	534	3	139	0	157	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	821	156	107	651	4	170	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1611	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2884	548	1630	3314	20	1468	0	1568	832	228	0
Grp Volume(v), veh/h	0	489	488	107	319	336	170	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1468	0	1568	1060	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.8	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	552	550	134	791	830	644	0	547	490	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.26	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	830	644	0	547	490	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	9.0	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.3	15.3	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.8	32.9	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		977			762			361			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		6.9	5.5	16.7		5.8	0.0	8.8				
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			22.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	84	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	84	148	536	3	89	1	95	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	97	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	968	109	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3117	350	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	484	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1748	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.6	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.6	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	759	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	296	723	759	578	0	489	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.7	16.5	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.4	35.2	34.5	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		962			789			212			2	
Approach Delay, s/veh		35.3			16.4			14.7			13.0	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.0	7.6	17.0		4.5	2.0	9.1				
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Future Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	607	639	351	299	660	0	608	288	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	418	364	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1760	1532	1757	1845	1568
Grp Volume(v), veh/h	607	512	478	299	660	0	608	284	262	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.3	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	10.9	42.0	8.8	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	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.4	7.4	9.7	0.0
LnGrp Delay(d),s/veh	61.8	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	38.9	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h		1597			959			1154			639	
Approach Delay, s/veh		67.5			107.8			1136.7			48.2	
Approach LOS		E			F			F			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	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+l1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.0	16.6				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			357.2									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
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	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.8	1.2	8.5	11.7	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			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	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
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	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
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	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			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	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.2									
HCM 2010 LOS			D									

HCM Signalized Intersection Capacity Analysis

Cumulative Without Project PM

1: W Laurel Dr & Adams St

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	480	1430	986	30	40	290
Future Volume (vph)	480	1430	986	30	40	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	261	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	485	1444	996	30	40	293
RTOR Reduction (vph)	0	0	0	0	0	223
Lane Group Flow (vph)	485	1444	1026	0	40	70
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.6	59.6	38.6		20.0	20.0
Effective Green, g (s)	60.3	60.7	39.7		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	466	2406	1558		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.04	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.6	7.4	19.0		26.5	26.8
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	45.6	0.3	1.1		0.1	0.2
Delay (s)	70.7	4.3	20.2		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.0	20.2		26.9	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			21.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			88.4		Sum of lost time (s)	11.6
Intersection Capacity Utilization			70.6%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1542	0	0	1012	264	570	0	369	0	0	0
Future Volume (vph)	0	1542	0	0	1012	264	570	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3358		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3358		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1623	0	0	1065	278	600	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1623	0	0	1343	0	300	300	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.6			38.6		20.0	20.0	20.0			
Effective Green, g (s)		60.7			39.7		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2393			1508		387	387	365			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.89		0.78	0.78	0.91			
Uniform Delay, d1		8.1			22.4		31.7	31.7	32.9			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.8			6.0		9.4	9.4	25.0			
Delay (s)		9.0			14.9		41.0	41.0	57.9			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			14.9			47.7			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			20.6			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			88.4			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			72.1%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Without Project PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1596	1435	0	486	410		
Future Volume (veh/h)	0	1596	1435	0	486	410		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1645	1479	0	501	423		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1879	1879	0	1085	499		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1645	1479	0	501	423		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	22.5	18.6	0.0	6.4	13.8		
Cycle Q Clear(g_c), s	0.0	22.5	18.6	0.0	6.4	13.8		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1879	1879	0	1085	499		
V/C Ratio(X)	0.00	0.88	0.79	0.00	0.46	0.85		
Avail Cap(c_a), veh/h	0	2163	2163	0	1142	525		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	11.0	10.1	0.0	14.8	17.3		
Incr Delay (d2), s/veh	0.0	3.5	1.5	0.0	0.2	11.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.4	9.2	0.0	3.0	7.5		
LnGrp Delay(d),s/veh	0.0	14.5	11.5	0.0	15.1	28.9		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1645	1479		924			
Approach Delay, s/veh		14.5	11.5		21.4			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.6		21.1		33.6		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.5		15.8		20.6		
Green Ext Time (p_c), s		4.0		0.7		4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			15.0					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	675	550	620	30	596	1016	660	533	40
Future Volume (veh/h)	50	400	20	675	550	620	30	596	1016	660	533	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	696	567	0	31	614	1047	680	549	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	736	1226	809	57	843	1265	572	1243	93
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3305	246
Grp Volume(v), veh/h	52	212	221	696	567	0	31	614	1047	680	290	300
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.1	14.2	24.2	15.1	0.0	2.1	19.2	15.9	20.0	14.8	14.8
Cycle Q Clear(g_c), s	3.6	14.1	14.2	24.2	15.1	0.0	2.1	19.2	15.9	20.0	14.8	14.8
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	736	1226	809	57	843	1265	572	659	677
V/C Ratio(X)	0.74	0.71	0.72	0.95	0.46	0.00	0.55	0.73	0.83	1.19	0.44	0.44
Avail Cap(c_a), veh/h	99	658	681	736	1907	1114	88	1000	1389	572	706	725
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	46.2	46.2	45.9	29.8	0.0	56.8	41.7	9.3	49.6	27.8	27.8
Incr Delay (d2), s/veh	8.7	6.6	6.5	21.4	0.6	0.0	3.0	2.2	4.0	101.7	0.5	0.5
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	1.9	7.2	7.4	13.5	7.3	0.0	1.1	9.6	6.7	17.4	7.2	7.5
LnGrp Delay(d),s/veh	65.2	52.9	52.8	67.2	30.4	0.0	59.8	43.9	13.3	151.3	28.3	28.2
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1263			1692			1270	
Approach Delay, s/veh		54.1			50.7			25.3			94.2	
Approach LOS		D			D			C			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	32.0	26.5	9.8	50.8	10.4	48.1	26.0	34.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	26.2	16.2	4.1	16.8	5.6	17.1	22.0	21.2				
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.1				
Intersection Summary												
HCM 2010 Ctrl Delay			53.6									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Cumulative Without Project PM

Intersection

Int Delay, s/veh 11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	117	12	191	134	1367	18	231	914	38
Future Volume (veh/h)	84	32	123	117	12	191	134	1367	18	231	914	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	118	12	193	135	1381	18	233	923	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1566	20	263	1259	560
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1617	164	1571	1774	5173	67	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	130	0	193	135	905	494	233	923	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.6	3.0	6.7	5.7	0.0	10.3	6.5	22.2	22.2	11.3	19.9	1.4
Cycle Q Clear(g_c), s	2.6	3.0	6.7	5.7	0.0	10.3	6.5	22.2	22.2	11.3	19.9	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1027	560	263	1259	560
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.88	0.88	0.89	0.73	0.07
Avail Cap(c_a), veh/h	401	421	353	508	0	448	263	1083	591	263	1259	560
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	35.6	37.3	32.7	0.0	35.3	38.8	29.0	29.0	36.6	24.6	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.0	8.4	14.0	28.0	2.2	0.1
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	1.3	1.6	3.1	2.9	0.0	4.8	3.6	11.5	13.4	7.5	10.1	0.6
LnGrp Delay(d),s/veh	36.2	36.5	42.0	33.9	0.0	40.3	47.8	37.4	43.1	64.6	26.8	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			323			1534			1194	
Approach Delay, s/veh		39.2			37.7			40.2			33.9	
Approach LOS		D			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		16.1	14.4	37.2		20.0	19.0	32.5				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		8.7	8.5	21.9		12.3	13.3	24.2				
Green Ext Time (p_c), s		0.7	0.2	2.5		1.1	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			37.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				 				 			 	
Traffic Volume (veh/h)	453	109	197	419	113	211	209	790	651	116	644	377
Future Volume (veh/h)	453	109	197	419	113	211	209	790	651	116	644	377
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	498	120	216	460	124	232	230	868	715	127	708	414
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	159	286	523	271	230	226	1236	553	154	666	388
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	597	1075	3442	1863	1583	1774	3539	1583	1774	2154	1257
Grp Volume(v), veh/h	498	0	336	460	124	232	230	868	715	127	581	541
Grp Sat Flow(s),veh/h/ln	1774	0	1673	1721	1863	1583	1774	1770	1583	1774	1770	1641
Q Serve(g_s), s	30.0	0.0	20.3	14.4	6.7	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	20.3	14.4	6.7	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.64	1.00		1.00	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	507
V/C Ratio(X)	1.03	0.00	0.75	0.88	0.46	1.01	1.02	0.70	1.29	0.82	1.06	1.07
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	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	0.00	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	40.0	0.0	37.1	45.7	43.0	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	48.6	0.0	7.2	14.2	1.2	61.2	64.8	3.3	144.8	23.2	56.3	58.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.2	0.0	10.2	7.9	3.5	10.9	10.9	11.9	38.9	4.8	25.1	23.6
LnGrp Delay(d),s/veh	88.6	0.0	44.2	59.9	44.2	108.2	112.9	34.2	180.6	72.6	94.3	96.7
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		834			816			1813			1249	
Approach Delay, s/veh		70.7			71.2			101.9			93.1	
Approach LOS		E			E			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	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0				
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	22.3	16.0	36.0	32.0	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			88.8									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	441	162	118	388	0	262	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	441	162	118	388	0	262	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.12	0.49	0.80	0.97	0.00	1.09	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.0	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	82.4	1.2	24.0	38.0	0.0	82.8	27.9	0.1	24.2	1.6	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	8.9	18.6	3.7	3.9	13.7	0.0	11.4	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	117.8	32.3	64.4	73.0	0.0	121.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		951			506			1764			1077	
Approach Delay, s/veh		127.5			71.0			63.0			31.5	
Approach LOS		F			E			E			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	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			70.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1069	141	83	649	4	79	2	153	5	0	1
Future Volume (veh/h)	0	1069	141	83	649	4	79	2	153	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1091	144	85	662	4	81	2	156	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1095	144	109	1733	10	579	13	509	433	11	66
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2998	395	1675	3406	21	1362	38	1524	952	32	197
Grp Volume(v), veh/h	0	613	622	85	325	341	83	0	156	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1401	0	1524	1180	0	0
Q Serve(g_s), s	0.0	20.7	20.8	2.9	6.8	6.8	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	20.8	2.9	6.8	6.8	1.9	0.0	4.3	1.9	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	592	0	509	509	0	0
V/C Ratio(X)	0.00	0.99	1.00	0.78	0.38	0.38	0.14	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	592	0	509	509	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.1	26.4	8.6	8.6	13.3	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	34.9	35.4	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.5	15.8	1.7	3.1	3.3	1.0	0.0	2.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	53.0	53.6	37.9	8.8	8.8	13.8	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	D	D	A	A	B		B	B		
Approach Vol, veh/h		1235			751			239			6	
Approach Delay, s/veh		53.3			12.1			15.0			12.8	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.3	4.9	22.8		3.9	0.0	8.8				
Green Ext Time (p_c), s		0.7	0.0	0.0		0.0	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			35.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	976	251	338	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	976	251	338	662	0	74	0	62	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1027	264	356	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	922	236	398	1982	0	419	0	368	0	471	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2686	687	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	649	642	356	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1670	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.3	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.3	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.41	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	585	573	398	1982	0	419	0	368	0	471	0
V/C Ratio(X)	0.43	1.11	1.12	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	585	573	462	1982	0	419	0	368	0	471	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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.3	25.3	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	71.3	74.6	17.7	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	23.9	24.0	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	96.7	100.0	46.5	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1292			1053			143			3	
Approach Delay, s/veh		98.3			21.7			23.8			21.6	
Approach LOS		F			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		24.0	22.2	31.0		24.0	4.6	48.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.8	17.3	28.5		2.1	2.0	10.3				
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5				
Intersection Summary												
HCM 2010 Ctrl Delay			61.6									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (veh/h)	551	640	330	350	800	320	300	371	730	280	259	579
Future Volume (veh/h)	551	640	330	350	800	320	300	371	730	280	259	579
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	574	667	344	365	833	0	312	386	760	292	270	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	574	522	489	365	833	0	312	386	760	292	270	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.1	19.5	11.5	9.3	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.1	19.5	11.5	9.3	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.07	0.96	0.96	2.56	1.03	0.00	2.79	0.90	1.99	1.16	0.45	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.3	30.3	34.3	21.4	0.0
Incr Delay (d2), s/veh	58.0	29.6	30.9	720.8	38.9	0.0	827.9	25.1	454.1	105.5	2.5	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	10.2	15.8	14.9	31.7	13.3	0.0	28.2	11.2	56.6	12.9	5.1	0.0
LnGrp Delay(d),s/veh	91.8	56.9	58.2	757.6	69.6	0.0	865.4	54.4	484.4	139.7	23.9	0.0
LnGrp LOS	F	E	E	F	F		F	D	F	F	C	
Approach Vol, veh/h	1585				1198			1458			562	
Approach Delay, s/veh	70.0				279.2			452.1			84.1	
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	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.3	14.5	20.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	239.8											
HCM 2010 LOS	F											

HCM 2010 Signalized Intersection Summary 12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1425	236
Future Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1425	236
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	244	219	62	229	198	258	125	1450	260	203	1484	246
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	776	339	272	394	330	158	1280	229	267	1447	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4325	774	3442	5085	1550
Grp Volume(v), veh/h	244	219	62	229	198	258	125	1136	574	203	1484	246
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	286	776	339	272	394	330	158	1003	506	267	1447	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	898	392	313	486	407	163	1003	506	267	1447	441
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	28.9	23.0	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	19.9	0.2	0.3	16.5	1.0	7.7	22.4	72.2	82.8	12.1	30.4	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.8	21.5	2.4	13.5	4.7
LnGrp Delay(d),s/veh	48.8	23.2	22.8	45.7	25.7	34.1	54.0	97.2	107.8	44.2	55.8	26.6
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		525			685			1835			1933	
Approach Delay, s/veh		35.1			35.5			97.6			50.9	
Approach LOS		D			D			F			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	10.0	25.5	15.4	20.1	10.8	24.7	15.9	19.5				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			64.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Without Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	800	110	620	610	620	160	1078	940	480	825	82
Future Volume (veh/h)	124	800	110	620	610	620	160	1078	940	480	825	82
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	816	112	633	622	633	163	1100	959	490	842	84
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	811	111	193	492	438	237	1062	463	366	1583	157
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3121	428	1774	1770	1575	3442	3539	1544	3442	4692	466
Grp Volume(v), veh/h	127	463	465	633	622	633	163	1100	959	490	607	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1779	1774	1770	1575	1721	1770	1544	1721	1695	1767
Q Serve(g_s), s	5.6	20.8	20.8	8.7	22.3	22.3	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.6	20.8	20.8	8.7	22.3	22.3	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	161	460	463	193	492	438	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.26	1.45	0.69	1.04	2.07	1.34	0.53	0.53
Avail Cap(c_a), veh/h	255	460	463	193	492	438	237	1062	463	366	1144	596
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	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.4	43.3	1039.7	134.2	212.9	8.2	37.4	489.2	170.4	1.8	3.4
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	3.1	15.6	15.7	60.0	29.1	35.5	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.0	72.9	1075.4	163.1	241.8	44.6	65.4	517.2	206.2	23.2	24.8
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1055			1888			2222			1416	
Approach Delay, s/veh		69.4			495.3			258.9			86.9	
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	13.0	28.5	13.2	25.3	10.0	31.5	11.7	26.8				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.6	24.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			259.3									
HCM 2010 LOS			F									

Appendix N

Level of Service

Calculations

Cumulative Plus Project

Ag Housing

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Cumulative Plus Project Ag AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	210	885	1138	20	30	600
Future Volume (vph)	210	885	1138	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	215	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	962	1237	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	228	962	1259	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	301	2394	1873		422	385
v/s Ratio Prot	c0.08	0.27	0.36		0.02	
v/s Ratio Perm	c0.44					c0.31
v/c Ratio	0.76	0.40	0.67		0.08	1.29
Uniform Delay, d1	14.0	6.2	15.0		26.6	34.0
Progression Factor	1.82	0.33	1.00		1.00	1.00
Incremental Delay, d2	9.6	0.1	1.1		0.1	147.4
Delay (s)	35.0	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		8.5	16.1		174.0	
Approach LOS		A	B		F	
Intersection Summary						
HCM 2000 Control Delay			47.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.94			
Actuated Cycle Length (s)			90.0		Sum of lost time (s)	11.6
Intersection Capacity Utilization			75.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Future Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1052	0	0	1558	332	272	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1052	0	0	1890	0	136	136	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.30			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.03		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.78		1.00	1.00	1.00			
Incremental Delay, d2		0.2			24.4		0.6	0.6	0.1			
Delay (s)		6.7			40.5		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			40.5			28.2			0.0	
Approach LOS		A			D			C			A	
Intersection Summary												
HCM 2000 Control Delay			28.4			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			62.9%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Plus Project Ag AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1045	1355	0	263	441		
Future Volume (veh/h)	0	1045	1355	0	263	441		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1136	1473	0	286	479		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1682	1715	0	1209	556		
Arrive On Green	0.00	0.49	0.49	0.00	0.36	0.36		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1136	1473	0	286	479		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	13.5	19.8	0.0	3.2	15.5		
Cycle Q Clear(g_c), s	0.0	13.5	19.8	0.0	3.2	15.5		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1682	1715	0	1209	556		
V/C Ratio(X)	0.00	0.68	0.86	0.00	0.24	0.86		
Avail Cap(c_a), veh/h	0	1981	2020	0	1334	614		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.3	11.9	0.0	11.8	15.7		
Incr Delay (d2), s/veh	0.0	0.5	3.1	0.0	0.1	10.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.4	10.1	0.0	1.5	8.2		
LnGrp Delay(d),s/veh	0.0	10.8	15.0	0.0	11.9	26.5		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1136	1473		765			
Approach Delay, s/veh		10.8	15.0		21.0			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.3		23.0		30.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.5		17.5		21.8		
Green Ext Time (p_c), s		3.3		0.9		3.4		
Intersection Summary								
HCM 2010 Ctrl Delay			14.9					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1016	480	320	20	333	965	170	295	20
Future Volume (veh/h)	30	220	20	1016	480	320	20	333	965	170	295	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1081	511	0	21	354	1027	181	314	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1225	1544	807	46	703	1543	251	821	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.20	0.20	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3270	218
Grp Volume(v), veh/h	32	125	130	1081	511	0	21	354	1027	181	164	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Cycle Q Clear(g_c), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	195	199	1225	1544	807	46	703	1543	251	432	445
V/C Ratio(X)	0.54	0.64	0.65	0.88	0.33	0.00	0.45	0.50	0.67	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1283	2689	1320	107	1241	1964	309	667	688
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	41.0	41.0	29.0	17.6	0.0	46.7	34.4	3.8	44.0	30.2	30.1
Incr Delay (d2), s/veh	2.8	7.4	7.5	8.0	0.3	0.0	2.5	0.6	0.6	9.5	0.6	0.5
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	0.9	3.6	3.7	14.9	4.5	0.0	0.6	4.3	3.8	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.0	48.3	48.5	37.0	17.8	0.0	49.2	35.0	4.4	53.5	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1592			1402			516	
Approach Delay, s/veh		48.5			30.9			12.8			38.7	
Approach LOS		D			C			B			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	41.3	16.9	8.6	30.4	9.0	49.3	13.3	25.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	31.2	9.1	3.2	9.8	3.8	11.3	7.2	10.8				
Green Ext Time (p_c), s	4.1	2.3	0.0	1.3	0.0	5.9	0.2	8.3				
Intersection Summary												
HCM 2010 Ctrl Delay			26.6									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Cumulative Plus Project Ag AM

Intersection

Int Delay, s/veh 10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1111	48
Future Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1111	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	70	11	106	257	893	14	140	1182	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	24	155	206	1889	30	174	1241	553
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1528	240	1563	1757	5108	80	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	81	0	106	257	587	320	140	1182	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1830	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.8	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.8	1.9
Prop In Lane	1.00		1.00	0.86		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1241	677	174	1241	553
V/C Ratio(X)	0.22	0.25	0.80	0.46	0.00	0.69	1.25	0.47	0.47	0.80	0.95	0.09
Avail Cap(c_a), veh/h	420	441	374	518	0	458	206	1241	677	229	1244	555
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	34.9	35.7	0.0	37.2	37.7	20.5	20.5	37.7	27.0	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	145.5	0.3	0.5	14.3	15.5	0.1
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	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.3	5.8	3.9	16.1	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.2	37.6	0.0	42.5	183.2	20.8	21.1	52.0	42.5	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			187			1164			1373	
Approach Delay, s/veh		37.6			40.4			56.7			42.6	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.0	16.0	35.9		14.4	14.4	37.6				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		12.0	12.0	29.8		7.6	8.6	13.4				
Green Ext Time (p_c), s		0.9	0.0	0.1		0.6	0.1	3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			47.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Future Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	327	158	469	415	353	133	973	435	198	786	288
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1188	573	3408	1845	1568	1774	3539	1583	1757	2514	921
Grp Volume(v), veh/h	320	0	461	438	398	243	132	574	356	173	501	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1682
Q Serve(g_s), s	14.3	0.0	20.6	10.2	17.1	11.4	5.9	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.6	10.2	17.1	11.4	5.9	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	484	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.99	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	484	469	415	353	133	973	435	198	548	526
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	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	32.2	0.0	28.5	34.1	30.6	28.4	37.0	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	29.0	26.1	33.6	5.6	75.5	2.6	15.6	32.6	22.2	22.9
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	10.6	0.0	13.9	6.5	12.5	5.5	5.7	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	57.5	60.3	64.2	34.0	112.4	27.7	42.7	67.5	48.7	49.3
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		781			1079			1062			1154	
Approach Delay, s/veh		63.2			55.8			43.3			51.8	
Approach LOS		E			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	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0				
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.6	7.9	24.0	16.3	19.1				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			52.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	392	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	392	111	161	715	73	126	1295	201
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	451	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	451	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.6	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.6	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.95	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	28.6	0.0	150.2	0.8	0.1	8.2	38.8	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	3.7	18.2	7.9	5.2	14.8	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	61.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			607			1091			1634	
Approach Delay, s/veh		90.0			63.0			51.2			64.2	
Approach LOS		F			E			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	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+l1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.6				
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			66.1									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	674	128	88	534	3	140	0	157	7	2	0
Future Volume (veh/h)	0	674	128	88	534	3	140	0	157	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	822	156	107	651	4	171	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1612	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1469	0	1568	830	228	0
Grp Volume(v), veh/h	0	490	488	107	319	336	171	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1469	0	1568	1059	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.9	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	644	0	547	489	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.27	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	644	0	547	489	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	8.9	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.4	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.9	33.0	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		978			762			362			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		6.9	5.5	16.7		5.9	0.0	8.8				
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			22.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	98	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	110	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3113	353	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	485	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	760	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	295	723	760	578	0	489	586	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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.8	16.6	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.5	35.3	34.6	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		963			789			212			2	
Approach Delay, s/veh		35.4			16.4			14.8			13.0	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+l1), s		5.0	7.7	17.0		4.5	2.0	9.1				
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	620	340	290	640	251	590	280	250	210	410	761
Future Volume (veh/h)	590	620	340	290	640	251	590	280	250	210	410	761
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	608	639	351	299	660	0	608	289	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	419	363	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1763	1530	1757	1845	1568
Grp Volume(v), veh/h	608	512	478	299	660	0	608	284	263	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.6	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	11.0	42.0	8.8	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	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.5	7.4	9.7	0.0
LnGrp Delay(d),s/veh	62.2	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	39.0	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h		1598			959			1155			639	
Approach Delay, s/veh		67.6			107.8			1135.7			48.2	
Approach LOS		E			F			F			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	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.1	16.6				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			357.2									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
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	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.8	1.2	8.5	11.7	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			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	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary 13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Ag AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
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(l)	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	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
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	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			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	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.2									
HCM 2010 LOS			D									

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Cumulative Plus Project Ag PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	481	1433	990	30	40	291
Future Volume (vph)	481	1433	990	30	40	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	259	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	486	1447	1000	30	40	294
RTOR Reduction (vph)	0	0	0	0	0	224
Lane Group Flow (vph)	486	1447	1030	0	40	70
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.6	59.6	38.6		20.0	20.0
Effective Green, g (s)	60.3	60.7	39.7		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	465	2406	1558		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.05	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.7	7.4	19.1		26.5	26.8
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	46.9	0.3	1.2		0.1	0.2
Delay (s)	72.1	4.3	20.3		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.4	20.3		26.9	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			21.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.85			
Actuated Cycle Length (s)			88.4		Sum of lost time (s)	11.6
Intersection Capacity Utilization			70.8%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1546	0	0	1017	264	572	0	369	0	0	0
Future Volume (vph)	0	1546	0	0	1017	264	572	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3358		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3358		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1627	0	0	1071	278	602	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1627	0	0	1349	0	301	301	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.6			38.6		20.0	20.0	20.0			
Effective Green, g (s)		60.7			39.7		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2393			1508		387	387	365			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.89		0.78	0.78	0.91			
Uniform Delay, d1		8.1			22.4		31.7	31.7	32.9			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.9			6.2		9.5	9.5	25.0			
Delay (s)		9.0			15.1		41.2	41.2	57.9			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			15.1			47.7			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			20.7			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			88.4			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			72.3%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Plus Project Ag PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1604	1442	0	486	415		
Future Volume (veh/h)	0	1604	1442	0	486	415		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1654	1487	0	501	428		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1881	1881	0	1087	500		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1654	1487	0	501	428		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	22.9	18.9	0.0	6.5	14.2		
Cycle Q Clear(g_c), s	0.0	22.9	18.9	0.0	6.5	14.2		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1881	1881	0	1087	500		
V/C Ratio(X)	0.00	0.88	0.79	0.00	0.46	0.86		
Avail Cap(c_a), veh/h	0	2142	2142	0	1131	520		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	11.1	10.2	0.0	14.9	17.5		
Incr Delay (d2), s/veh	0.0	3.8	1.6	0.0	0.2	12.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.8	9.3	0.0	3.0	7.8		
LnGrp Delay(d),s/veh	0.0	14.9	11.7	0.0	15.2	30.1		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1654	1487		929			
Approach Delay, s/veh		14.9	11.7		22.0			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.9		21.3		33.9		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.9		16.2		20.9		
Green Ext Time (p_c), s		3.9		0.5		4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			15.4					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	687	550	620	30	597	1026	660	534	40
Future Volume (veh/h)	50	400	20	687	550	620	30	597	1026	660	534	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	708	567	0	31	615	1058	680	551	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	736	1225	808	57	844	1266	571	1244	92
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3306	246
Grp Volume(v), veh/h	52	212	221	708	567	0	31	615	1058	680	291	301
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.1	14.2	24.8	15.1	0.0	2.1	19.3	16.2	20.0	14.8	14.9
Cycle Q Clear(g_c), s	3.6	14.1	14.2	24.8	15.1	0.0	2.1	19.3	16.2	20.0	14.8	14.9
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	736	1225	808	57	844	1266	571	659	677
V/C Ratio(X)	0.74	0.71	0.72	0.96	0.46	0.00	0.55	0.73	0.84	1.19	0.44	0.44
Avail Cap(c_a), veh/h	99	657	680	736	1906	1113	88	999	1388	571	705	724
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	46.3	46.3	46.2	29.8	0.0	56.8	41.7	9.4	49.6	27.8	27.8
Incr Delay (d2), s/veh	8.7	6.6	6.5	24.6	0.6	0.0	3.0	2.2	4.3	102.1	0.5	0.5
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	1.9	7.2	7.4	14.0	7.3	0.0	1.1	9.6	6.9	17.5	7.3	7.5
LnGrp Delay(d),s/veh	65.3	52.9	52.8	70.7	30.4	0.0	59.9	43.9	13.7	151.7	28.3	28.2
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1275			1704			1272	
Approach Delay, s/veh		54.2			52.8			25.4			94.3	
Approach LOS		D			D			C			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	32.0	26.5	9.9	50.9	10.4	48.1	26.0	34.7				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+I1), s	26.8	16.2	4.1	16.9	5.6	17.1	22.0	21.3				
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.2				
Intersection Summary												
HCM 2010 Ctrl Delay			54.2									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Cumulative Plus Project Ag PM

Intersection

Int Delay, s/veh 11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	118	12	191	134	1378	19	231	927	38
Future Volume (veh/h)	84	32	123	118	12	191	134	1378	19	231	927	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	119	12	193	135	1392	19	233	936	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1571	21	263	1262	561
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1619	163	1571	1774	5170	71	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	131	0	193	135	913	498	233	936	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.7	3.0	6.8	5.8	0.0	10.3	6.5	22.5	22.5	11.3	20.3	1.4
Cycle Q Clear(g_c), s	2.7	3.0	6.8	5.8	0.0	10.3	6.5	22.5	22.5	11.3	20.3	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1030	562	263	1262	561
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.89	0.89	0.89	0.74	0.07
Avail Cap(c_a), veh/h	400	420	353	507	0	447	263	1081	590	263	1262	561
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	35.7	37.3	32.8	0.0	35.4	38.9	29.1	29.1	36.7	24.7	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.1	8.8	14.7	28.4	2.4	0.1
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	1.3	1.6	3.1	2.9	0.0	4.8	3.6	11.8	13.8	7.6	10.3	0.6
LnGrp Delay(d),s/veh	36.3	36.6	42.1	34.0	0.0	40.3	48.0	37.9	43.8	65.1	27.1	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			324			1546			1207	
Approach Delay, s/veh		39.2			37.8			40.7			34.2	
Approach LOS		D			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		16.1	14.4	37.3		20.0	19.0	32.7				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		8.8	8.5	22.3		12.3	13.3	24.5				
Green Ext Time (p_c), s		0.7	0.2	2.4		1.1	0.0	2.2				
Intersection Summary												
HCM 2010 Ctrl Delay			37.9									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Future Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
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	498	126	243	460	132	232	255	868	715	127	742	430
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	152	293	523	271	230	226	1236	553	154	669	386
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	570	1099	3442	1863	1583	1774	3539	1583	1774	2163	1249
Grp Volume(v), veh/h	498	0	369	460	132	232	255	868	715	127	606	566
Grp Sat Flow(s),veh/h/ln	1774	0	1669	1721	1863	1583	1774	1770	1583	1774	1770	1642
Q Serve(g_s), s	30.0	0.0	22.9	14.4	7.2	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	22.9	14.4	7.2	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.66	1.00		1.00	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	484	0	444	523	271	230	226	1236	553	154	547	508
V/C Ratio(X)	1.03	0.00	0.83	0.88	0.49	1.01	1.13	0.70	1.29	0.82	1.11	1.11
Avail Cap(c_a), veh/h	484	0	444	563	271	230	226	1236	553	177	547	508
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	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	40.0	0.0	38.0	45.7	43.2	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	48.6	0.0	12.5	14.2	1.4	61.2	99.1	3.3	144.8	23.2	71.8	75.1
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	21.2	0.0	12.1	7.9	3.8	10.9	13.1	11.9	38.9	4.8	27.5	26.0
LnGrp Delay(d),s/veh	88.6	0.0	50.5	59.9	44.6	108.2	147.1	34.2	180.6	72.6	109.8	113.1
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		867			824			1838			1299	
Approach Delay, s/veh		72.4			71.0			106.8			107.6	
Approach LOS		E			E			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	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0				
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	24.9	16.0	36.0	32.0	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			94.7									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	334	427	158	113	377	285	254	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	377	285	254	1349	93	162	872	192
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	445	165	118	393	0	265	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	445	165	118	393	0	265	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.4	5.9	18.9	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.4	5.9	18.9	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.13	0.50	0.80	0.99	0.00	1.10	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.1	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	86.0	1.2	24.0	41.2	0.0	86.8	27.9	0.1	24.2	1.6	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	8.9	19.0	3.7	3.9	14.2	0.0	11.7	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	121.4	32.5	64.4	76.3	0.0	125.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		958			511			1767			1077	
Approach Delay, s/veh		128.9			73.6			63.7			31.5	
Approach LOS		F			E			E			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	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			71.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1075	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1075	141	83	649	4	86	2	154	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1097	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1096	144	109	1733	10	581	12	509	430	11	65
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1368	35	1524	942	32	195
Grp Volume(v), veh/h	0	616	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1403	0	1524	1168	0	0
Q Serve(g_s), s	0.0	20.9	20.9	2.9	6.8	6.8	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.9	20.9	2.9	6.8	6.8	2.1	0.0	4.4	2.1	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	593	0	509	505	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.15	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	593	0	509	505	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.2	26.4	8.6	8.6	13.4	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	36.1	36.7	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.8	16.0	1.7	3.1	3.3	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	54.3	54.8	37.9	8.8	8.8	13.9	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	F	D	A	A	B		B	B		
Approach Vol, veh/h		1241			751			247			6	
Approach Delay, s/veh		54.5			12.1			15.1			12.8	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.4	4.9	22.9		4.1	0.0	8.8				
Green Ext Time (p_c), s		0.8	0.0	0.0		0.0	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			35.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	257	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	257	339	662	0	74	0	62	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	271	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	916	240	399	1983	0	418	0	367	0	470	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2670	700	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	654	645	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1668	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.4	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.4	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.42	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	584	572	399	1983	0	418	0	367	0	470	0
V/C Ratio(X)	0.43	1.12	1.13	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	584	572	462	1983	0	418	0	367	0	470	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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.4	25.4	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	74.3	77.9	17.8	0.1	0.0	1.0	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.4	24.5	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	99.7	103.2	46.7	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1300			1054			143			3	
Approach Delay, s/veh		101.5			21.7			23.8			21.6	
Approach LOS		F			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		24.0	22.2	31.0		24.0	4.6	48.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.8	17.4	28.5		2.1	2.0	10.3				
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5				
Intersection Summary												
HCM 2010 Ctrl Delay			63.3									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	557	640	330	350	800	325	300	376	730	284	263	586
Future Volume (veh/h)	557	640	330	350	800	325	300	376	730	284	263	586
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	580	667	344	365	833	0	312	392	760	296	274	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	580	522	489	365	833	0	312	392	760	296	274	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.08	0.96	0.96	2.56	1.03	0.00	2.79	0.92	1.99	1.17	0.46	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.5	30.3	34.3	21.5	0.0
Incr Delay (d2), s/veh	61.7	29.6	30.9	720.8	38.9	0.0	827.9	27.1	454.1	111.2	2.5	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	10.5	15.8	14.9	31.7	13.3	0.0	28.2	11.6	56.6	13.3	5.2	0.0
LnGrp Delay(d),s/veh	95.4	56.9	58.2	757.6	69.6	0.0	865.4	56.6	484.4	145.5	24.0	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1591			1198			1464			570	
Approach Delay, s/veh		71.4			279.2			451.0			87.1	
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	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.4	14.5	20.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			240.1									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary
12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	210	60	221	190	248	120	1393	251	195	1428	237
Future Volume (veh/h)	235	210	60	221	190	248	120	1393	251	195	1428	237
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	219	62	230	198	258	125	1451	261	203	1488	247
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	776	339	273	394	330	158	1278	229	267	1445	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4322	776	3442	5085	1550
Grp Volume(v), veh/h	245	219	62	230	198	258	125	1138	574	203	1488	247
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	287	776	339	273	394	330	158	1003	505	267	1445	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	897	392	312	485	407	162	1003	505	267	1445	441
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	28.9	23.1	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	20.1	0.2	0.3	16.7	1.0	7.7	22.4	73.1	83.6	12.1	31.6	5.1
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	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.9	21.6	2.4	13.6	4.7
LnGrp Delay(d),s/veh	49.0	23.3	22.8	45.9	25.7	34.1	54.1	98.1	108.6	44.2	57.0	26.7
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		526			686			1837			1938	
Approach Delay, s/veh		35.2			35.6			98.4			51.8	
Approach LOS		D			D			F			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	10.0	25.5	15.4	20.1	10.8	24.7	16.0	19.5				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			65.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary 13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Ag PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	802	110	620	612	620	160	1078	940	480	825	84
Future Volume (veh/h)	125	802	110	620	612	620	160	1078	940	480	825	84
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	128	818	112	633	624	633	163	1100	959	490	842	86
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	812	111	193	491	437	237	1062	463	366	1579	161
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3122	427	1774	1770	1575	3442	3539	1544	3442	4680	476
Grp Volume(v), veh/h	128	464	466	633	624	633	163	1100	959	490	609	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1780	1774	1770	1575	1721	1770	1544	1721	1695	1765
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	162	460	463	193	491	437	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.27	1.45	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	491	437	237	1062	463	366	1144	596
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	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.9	43.8	1039.7	137.1	214.4	8.2	37.4	489.2	170.4	1.8	3.4
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	3.2	15.7	15.8	60.0	29.5	35.6	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.5	73.4	1075.4	166.0	243.3	44.6	65.4	517.2	206.2	23.2	24.9
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1058			1890			2222			1418	
Approach Delay, s/veh		69.9			496.5			258.9			86.8	
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	13.0	28.5	13.2	25.3	10.0	31.5	11.8	26.7				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			259.6									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	140	412	373	228	120	540	335	163	675	246
Future Volume (veh/h)	301	292	140	412	373	228	120	540	335	163	675	246
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	149	438	397	243	128	574	356	173	718	262
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	328	157	469	415	353	133	973	435	198	786	287
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1191	571	3408	1845	1568	1774	3539	1583	1757	2517	918
Grp Volume(v), veh/h	320	0	460	438	397	243	128	574	356	173	500	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1683
Q Serve(g_s), s	14.3	0.0	20.5	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.5	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.96	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
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(l)	1.00	0.00	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	32.2	0.0	28.5	34.1	30.6	28.4	36.9	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	28.5	26.1	33.1	5.6	66.2	2.6	15.6	32.6	22.1	22.7
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	10.6	0.0	13.8	6.5	12.4	5.5	5.3	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	56.9	60.3	63.7	34.0	103.0	27.7	42.7	67.5	48.5	49.2
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		780			1078			1058			1153	
Approach Delay, s/veh		62.9			55.6			41.9			51.6	
Approach LOS		E			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	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0				
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.5	7.8	24.0	16.3	19.0				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			52.3									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Future Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
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	1863	1845	1845	1845	1863	1863	1863	1845	1845	1845
Adj Flow Rate, veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	383	413	351	487	468	398	167	955	654	195	1005	450
Arrive On Green	0.11	0.22	0.22	0.14	0.25	0.25	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	3442	1863	1583	3408	1845	1568	1774	3539	1583	1757	3505	1568
Grp Volume(v), veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1704	1845	1568	1774	1770	1583	1757	1752	1568
Q Serve(g_s), s	5.7	9.8	5.1	8.0	12.9	8.6	4.6	8.9	10.7	6.1	11.6	9.1
Cycle Q Clear(g_c), s	5.7	9.8	5.1	8.0	12.9	8.6	4.6	8.9	10.7	6.1	11.6	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	413	351	487	468	398	167	955	654	195	1005	450
V/C Ratio(X)	0.84	0.75	0.43	0.90	0.85	0.61	0.79	0.60	0.54	0.89	0.71	0.58
Avail Cap(c_a), veh/h	383	473	402	487	527	448	197	955	654	195	1005	450
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	27.4	22.9	21.1	26.5	22.4	20.8	27.9	20.0	14.0	27.6	20.1	19.2
Incr Delay (d2), s/veh	14.9	5.8	0.8	19.4	11.5	2.0	16.5	2.8	3.2	34.9	4.3	5.5
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	3.5	5.7	2.3	5.0	8.0	3.9	3.0	4.7	5.2	4.9	6.2	4.5
LnGrp Delay(d),s/veh	42.3	28.7	21.9	46.0	33.9	22.7	44.4	22.8	17.2	62.5	24.5	24.7
LnGrp LOS	D	C	C	D	C	C	D	C	B	E	C	C
Approach Vol, veh/h		781			1079			1062			1154	
Approach Delay, s/veh		33.0			36.3			23.6			30.2	
Approach LOS		C			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	11.0	21.0	13.0	18.0	9.9	22.1	11.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	17.0	9.0	16.0	7.0	17.0	7.0	18.0				
Max Q Clear Time (g_c+I1), s	8.1	12.7	10.0	11.8	6.6	13.6	7.7	14.9				
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	1.8	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			30.6									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.94	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	27.8	0.0	150.2	0.8	0.1	8.2	38.8	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	3.7	18.2	7.9	5.2	14.5	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	60.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			605			1091			1634	
Approach Delay, s/veh		90.0			62.3			51.2			64.2	
Approach LOS		F			E			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	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.5				
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			66.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Ag AM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	674	128	88	534	3	139	0	157	7	2	0
Future Volume (veh/h)	0	674	128	88	534	3	139	0	157	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	822	156	107	651	4	170	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1612	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1468	0	1568	832	228	0
Grp Volume(v), veh/h	0	490	488	107	319	336	170	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1468	0	1568	1060	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.8	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	644	0	547	490	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.26	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	644	0	547	490	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	8.9	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.4	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.9	33.0	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		978			762			361			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+l1), s		6.9	5.5	16.7		5.8	0.0	8.8				
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			22.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Ag AM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	98	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	110	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3113	353	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	485	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	760	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	295	723	760	578	0	489	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.8	16.6	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.5	35.3	34.6	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		963			789			212			2	
Approach Delay, s/veh		35.4			16.4			14.8			13.0	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.0	7.7	17.0		4.5	2.0	9.1				
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Future Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	607	639	351	299	660	0	608	288	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	418	364	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1760	1532	1757	1845	1568
Grp Volume(v), veh/h	607	512	478	299	660	0	608	284	262	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.3	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	10.9	42.0	8.8	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	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.4	7.4	9.7	0.0
LnGrp Delay(d),s/veh	61.8	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	38.9	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h	1597				959			1154			639	
Approach Delay, s/veh	67.5				107.8			1136.7			48.2	
Approach LOS	E				F			F			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	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.0	16.6				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	357.2											
HCM 2010 LOS	F											

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
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	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.9	1.2	8.5	11.7	3.0	5.4	2.9
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			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	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Ag AM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
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	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
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	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			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	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	455	110	200	419	114	211	212	790	651	116	644	379
Future Volume (veh/h)	455	110	200	419	114	211	212	790	651	116	644	379
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	500	121	220	460	125	232	233	868	715	127	708	416
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	158	287	523	271	230	226	1236	553	154	664	390
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	593	1079	3442	1863	1583	1774	3539	1583	1774	2150	1260
Grp Volume(v), veh/h	500	0	341	460	125	232	233	868	715	127	582	542
Grp Sat Flow(s),veh/h/ln	1774	0	1672	1721	1863	1583	1774	1770	1583	1774	1770	1640
Q Serve(g_s), s	30.0	0.0	20.7	14.4	6.8	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	20.7	14.4	6.8	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	507
V/C Ratio(X)	1.03	0.00	0.77	0.88	0.46	1.01	1.03	0.70	1.29	0.82	1.06	1.07
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	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	0.00	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	40.0	0.0	37.2	45.7	43.1	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	49.8	0.0	7.8	14.2	1.2	61.2	68.5	3.3	144.8	23.2	56.9	59.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.3	0.0	10.5	7.9	3.6	10.9	11.1	11.9	38.9	4.8	25.2	23.7
LnGrp Delay(d),s/veh	89.8	0.0	45.0	59.9	44.3	108.2	116.5	34.2	180.6	72.6	94.9	97.4
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		841			817			1816			1251	
Approach Delay, s/veh		71.6			71.2			102.4			93.7	
Approach LOS		E			E			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	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0				
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	22.7	16.0	36.0	32.0	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			89.2									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Ag PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Future Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	498	126	243	460	132	232	255	868	715	127	742	430
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	577	345	293	549	330	281	296	1209	794	160	939	420
Arrive On Green	0.17	0.19	0.19	0.16	0.18	0.18	0.17	0.34	0.34	0.09	0.27	0.27
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	498	126	243	460	132	232	255	868	715	127	742	430
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.1	4.2	10.6	9.3	4.5	10.1	10.0	15.3	24.5	5.0	14.0	19.0
Cycle Q Clear(g_c), s	10.1	4.2	10.6	9.3	4.5	10.1	10.0	15.3	24.5	5.0	14.0	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	577	345	293	549	330	281	296	1209	794	160	939	420
V/C Ratio(X)	0.86	0.37	0.83	0.84	0.40	0.83	0.86	0.72	0.90	0.79	0.79	1.02
Avail Cap(c_a), veh/h	577	416	354	577	416	354	297	1209	794	173	939	420
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(l)	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	29.0	25.5	28.1	29.2	26.1	28.4	29.0	20.6	16.2	31.9	24.5	26.3
Incr Delay (d2), s/veh	12.9	0.6	13.0	10.1	0.8	12.2	21.9	3.7	15.3	20.5	6.8	50.2
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	5.8	2.2	5.7	5.2	2.4	5.3	6.7	8.1	16.0	3.4	7.7	14.1
LnGrp Delay(d),s/veh	41.9	26.2	41.1	39.3	26.9	40.6	50.9	24.2	31.6	52.5	31.2	76.5
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	F
Approach Vol, veh/h		867			824			1838			1299	
Approach Delay, s/veh		39.4			37.7			30.8			48.3	
Approach LOS		D			D			C			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	10.5	28.5	15.4	17.3	15.9	23.0	16.0	16.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	24.0	12.0	16.0	12.0	19.0	12.0	16.0				
Max Q Clear Time (g_c+l1), s	7.0	26.5	11.3	12.6	12.0	21.0	12.1	12.1				
Green Ext Time (p_c), s	0.0	0.0	0.2	0.5	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			38.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	334	424	156	113	373	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	424	156	113	373	285	252	1349	93	162	872	192
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	442	162	118	389	0	262	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	442	162	118	389	0	262	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.12	0.49	0.80	0.98	0.00	1.09	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.0	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	83.3	1.2	24.0	38.6	0.0	82.8	27.9	0.1	24.2	1.6	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	8.9	18.7	3.7	3.9	13.8	0.0	11.4	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	118.7	32.3	64.4	73.6	0.0	121.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		952			507			1764			1077	
Approach Delay, s/veh		127.9			71.5			63.0			31.5	
Approach LOS		F			E			E			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	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			70.5									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Ag PM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1070	141	83	649	4	80	2	153	5	0	1
Future Volume (veh/h)	0	1070	141	83	649	4	80	2	153	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1092	144	85	662	4	82	2	156	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1095	144	109	1733	10	579	13	509	433	11	66
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2998	395	1675	3406	21	1363	38	1524	951	32	196
Grp Volume(v), veh/h	0	614	622	85	325	341	84	0	156	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1401	0	1524	1179	0	0
Q Serve(g_s), s	0.0	20.8	20.9	2.9	6.8	6.8	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.8	20.9	2.9	6.8	6.8	2.0	0.0	4.3	2.0	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	592	0	509	509	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.14	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	592	0	509	509	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.1	26.4	8.6	8.6	13.3	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	35.1	35.6	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.6	15.9	1.7	3.1	3.3	1.0	0.0	2.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	53.2	53.8	37.9	8.8	8.8	13.8	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	D	D	A	A	B		B	B		
Approach Vol, veh/h		1236			751			240			6	
Approach Delay, s/veh		53.5			12.1			15.0			12.8	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.3	4.9	22.9		4.0	0.0	8.8				
Green Ext Time (p_c), s		0.7	0.0	0.0		0.0	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			35.3									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Ag PM
 With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	976	252	338	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	976	252	338	662	0	74	0	62	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1027	265	356	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	921	237	398	1982	0	419	0	368	0	471	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2683	689	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	650	642	356	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1670	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.3	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.3	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.41	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	585	573	398	1982	0	419	0	368	0	471	0
V/C Ratio(X)	0.43	1.11	1.12	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	585	573	462	1982	0	419	0	368	0	471	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.3	25.3	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	71.7	75.0	17.7	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.0	24.0	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	97.0	100.3	46.5	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1293			1053			143			3	
Approach Delay, s/veh		98.7			21.7			23.8			21.6	
Approach LOS		F			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		24.0	22.2	31.0		24.0	4.6	48.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.8	17.3	28.5		2.1	2.0	10.3				
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5				
Intersection Summary												
HCM 2010 Ctrl Delay			61.8									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	640	330	350	800	320	300	372	730	280	260	580
Future Volume (veh/h)	552	640	330	350	800	320	300	372	730	280	260	580
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	575	667	344	365	833	0	312	388	760	292	271	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	575	522	489	365	833	0	312	388	760	292	271	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.2	19.5	11.5	9.3	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.2	19.5	11.5	9.3	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.07	0.96	0.96	2.56	1.03	0.00	2.79	0.91	1.99	1.16	0.45	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.4	30.3	34.3	21.4	0.0
Incr Delay (d2), s/veh	58.6	29.6	30.9	720.8	38.9	0.0	827.9	25.7	454.1	105.5	2.5	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	10.3	15.8	14.9	31.7	13.3	0.0	28.2	11.4	56.6	12.9	5.2	0.0
LnGrp Delay(d),s/veh	92.4	56.9	58.2	757.6	69.6	0.0	865.4	55.1	484.4	139.7	23.9	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1586			1198			1460			563	
Approach Delay, s/veh		70.2			279.2			451.7			84.0	
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	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.3	14.5	20.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			239.8									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1426	236
Future Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1426	236
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	244	219	62	229	198	258	125	1450	260	203	1485	246
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	776	339	272	394	330	158	1280	229	267	1447	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4325	774	3442	5085	1550
Grp Volume(v), veh/h	244	219	62	229	198	258	125	1136	574	203	1485	246
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	286	776	339	272	394	330	158	1003	506	267	1447	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	898	392	313	486	407	163	1003	506	267	1447	441
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	28.9	23.0	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	19.9	0.2	0.3	16.5	1.0	7.7	22.4	72.2	82.8	12.1	30.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.8	21.5	2.4	13.5	4.7
LnGrp Delay(d),s/veh	48.8	23.2	22.8	45.7	25.7	34.1	54.0	97.2	107.8	44.2	56.0	26.6
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		525			685			1835			1934	
Approach Delay, s/veh		35.1			35.5			97.6			51.0	
Approach LOS		D			D			F			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	10.0	25.5	15.4	20.1	10.8	24.7	15.9	19.5				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			64.4									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Ag PM
With Transportation Demand Management

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	800	110	620	610	620	160	1078	940	480	825	83
Future Volume (veh/h)	125	800	110	620	610	620	160	1078	940	480	825	83
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	128	816	112	633	622	633	163	1100	959	490	842	85
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	811	111	193	491	437	237	1062	463	366	1581	159
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3121	428	1774	1770	1575	3442	3539	1544	3442	4686	471
Grp Volume(v), veh/h	128	463	465	633	622	633	163	1100	959	490	608	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1779	1774	1770	1575	1721	1770	1544	1721	1695	1766
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	162	460	463	193	491	437	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.27	1.45	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	491	437	237	1062	463	366	1144	596
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	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.4	43.3	1039.7	135.4	214.4	8.2	37.4	489.2	170.4	1.8	3.4
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	3.2	15.6	15.7	60.0	29.2	35.6	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.0	72.9	1075.4	164.3	243.3	44.6	65.4	517.2	206.2	23.2	24.8
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h	1056				1888				2222			
Approach Delay, s/veh	69.4				496.3				258.9			
Approach LOS	E				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	13.0	28.5	13.2	25.3	10.0	31.5	11.8	26.7				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	259.5											
HCM 2010 LOS	F											

Appendix O

Level of Service

Calculations

Cumulative Plus Project

Apartments

Conditions

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Cumulative Plus Project Apts AM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	213	893	1141	20	30	600
Future Volume (vph)	213	893	1141	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	214	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	232	971	1240	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	232	971	1262	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	300	2394	1873		422	385
v/s Ratio Prot	c0.08	0.28	0.36		0.02	
v/s Ratio Perm	c0.45					c0.31
v/c Ratio	0.77	0.41	0.67		0.08	1.29
Uniform Delay, d1	14.6	6.2	15.0		26.6	34.0
Progression Factor	1.81	0.33	1.00		1.00	1.00
Incremental Delay, d2	10.8	0.1	1.1		0.1	147.4
Delay (s)	37.3	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		9.0	16.1		174.0	
Approach LOS		A	B		F	
Intersection Summary						
HCM 2000 Control Delay			47.7		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.95			
Actuated Cycle Length (s)			90.0		Sum of lost time (s)	11.6
Intersection Capacity Utilization			76.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	979	0	0	1436	305	252	0	127	0	0	0
Future Volume (vph)	0	979	0	0	1436	305	252	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1064	0	0	1561	332	274	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1064	0	0	1893	0	137	137	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.31			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.04		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.77		1.00	1.00	1.00			
Incremental Delay, d2		0.2			25.0		0.6	0.6	0.1			
Delay (s)		6.7			41.0		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			41.0			28.3			0.0	
Approach LOS		A			D			C			A	
Intersection Summary												
HCM 2000 Control Delay			28.6			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			63.1%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Plus Project Apts AM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1066	1380	0	263	443		
Future Volume (veh/h)	0	1066	1380	0	263	443		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800		
Adj Flow Rate, veh/h	0	1159	1500	0	286	482		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	4	2	0	4	4		
Cap, veh/h	0	1694	1727	0	1207	555		
Arrive On Green	0.00	0.50	0.50	0.00	0.36	0.36		
Sat Flow, veh/h	0	3599	3670	0	3325	1530		
Grp Volume(v), veh/h	0	1159	1500	0	286	482		
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530		
Q Serve(g_s), s	0.0	14.1	20.7	0.0	3.3	15.9		
Cycle Q Clear(g_c), s	0.0	14.1	20.7	0.0	3.3	15.9		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1694	1727	0	1207	555		
V/C Ratio(X)	0.00	0.68	0.87	0.00	0.24	0.87		
Avail Cap(c_a), veh/h	0	1942	1980	0	1308	602		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.5	12.2	0.0	12.1	16.1		
Incr Delay (d2), s/veh	0.0	0.6	3.6	0.0	0.1	11.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	6.7	10.7	0.0	1.5	8.5		
LnGrp Delay(d),s/veh	0.0	11.1	15.7	0.0	12.2	28.0		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1159	1500		768			
Approach Delay, s/veh		11.1	15.7		22.1			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		31.1		23.3		31.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+l1), s		16.1		17.9		22.7		
Green Ext Time (p_c), s		3.3		0.8		3.2		
Intersection Summary								
HCM 2010 Ctrl Delay			15.6					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Future Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1088	511	0	21	359	1056	181	315	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1223	1541	806	46	713	1549	251	830	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.21	0.21	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3271	217
Grp Volume(v), veh/h	32	125	130	1088	511	0	21	359	1056	181	165	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Cycle Q Clear(g_c), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	194	199	1223	1541	806	46	713	1549	251	436	449
V/C Ratio(X)	0.54	0.64	0.65	0.89	0.33	0.00	0.45	0.50	0.68	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	772	790	1274	2669	1311	106	1232	1956	307	663	683
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	41.3	41.3	29.4	17.8	0.0	47.0	34.5	3.9	44.3	30.2	30.2
Incr Delay (d2), s/veh	2.9	7.4	7.6	8.5	0.3	0.0	2.6	0.6	0.7	9.7	0.5	0.5
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	0.9	3.6	3.8	15.2	4.5	0.0	0.6	4.3	4.0	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.3	48.7	48.8	37.9	18.0	0.0	49.5	35.1	4.6	54.0	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1599			1436			517	
Approach Delay, s/veh		48.9			31.6			12.9			38.9	
Approach LOS		D			C			B			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	41.5	17.0	8.6	30.9	9.0	49.5	13.4	26.1				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8				
Max Q Clear Time (g_c+I1), s	31.7	9.2	3.2	9.8	3.9	11.4	7.2	11.0				
Green Ext Time (p_c), s	3.8	2.3	0.0	1.3	0.0	5.9	0.2	8.5				
Intersection Summary												
HCM 2010 Ctrl Delay			26.8									
HCM 2010 LOS			C									

HCM 2010 TWSC
5: Post Dr/El Rancho Way & Calle Del Adobe

Cumulative Plus Project Apts AM

Intersection

Int Delay, s/veh 10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	67	10	100	242	871	15	132	1119	48
Future Volume (veh/h)	79	31	174	67	10	100	242	871	15	132	1119	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	71	11	106	257	927	16	140	1190	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	23	155	206	1887	33	174	1243	554
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1531	237	1563	1757	5098	88	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	82	0	106	257	610	333	140	1190	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1829	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	12.0	12.0	6.6	28.1	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	12.0	12.0	6.6	28.1	1.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1243	677	174	1243	554
V/C Ratio(X)	0.22	0.25	0.80	0.47	0.00	0.69	1.25	0.49	0.49	0.80	0.96	0.09
Avail Cap(c_a), veh/h	420	441	374	517	0	457	206	1243	677	228	1243	554
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	35.0	35.7	0.0	37.2	37.7	20.7	20.7	37.7	27.1	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	146.1	0.3	0.6	14.4	16.4	0.1
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	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.6	6.1	3.9	16.5	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.3	37.7	0.0	42.5	183.8	21.0	21.3	52.1	43.5	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			188			1200			1381	
Approach Delay, s/veh		37.6			40.4			55.9			43.4	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.0	16.0	36.0		14.4	14.4	37.6				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0				
Max Q Clear Time (g_c+I1), s		12.0	12.0	30.1		7.6	8.6	14.0				
Green Ext Time (p_c), s		0.9	0.0	0.0		0.6	0.1	3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			47.5									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Future Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
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	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	312	170	469	415	353	133	973	435	198	778	295
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1134	620	3408	1845	1568	1774	3539	1583	1757	2488	943
Grp Volume(v), veh/h	356	0	498	438	400	243	136	574	356	173	506	484
Grp Sat Flow(s),veh/h/ln	1774	0	1753	1704	1845	1568	1774	1770	1583	1757	1752	1678
Q Serve(g_s), s	15.0	0.0	22.0	10.2	17.2	11.4	6.0	11.2	16.8	7.8	22.3	22.3
Cycle Q Clear(g_c), s	15.0	0.0	22.0	10.2	17.2	11.4	6.0	11.2	16.8	7.8	22.3	22.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	333	0	482	469	415	353	133	973	435	198	548	524
V/C Ratio(X)	1.07	0.00	1.03	0.93	0.96	0.69	1.02	0.59	0.82	0.88	0.92	0.92
Avail Cap(c_a), veh/h	333	0	482	469	415	353	133	973	435	198	548	524
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	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	32.5	0.0	29.0	34.1	30.7	28.4	37.0	25.1	27.1	34.9	26.6	26.6
Incr Delay (d2), s/veh	69.2	0.0	49.7	26.1	34.7	5.6	84.0	2.6	15.6	32.6	23.5	24.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	17.2	6.5	12.7	5.5	6.0	5.9	9.2	5.5	14.3	13.8
LnGrp Delay(d),s/veh	101.7	0.0	78.7	60.3	65.4	34.0	121.3	27.7	42.7	67.5	50.1	50.9
LnGrp LOS	F		F	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		854			1081			1066			1163	
Approach Delay, s/veh		88.3			56.3			44.7			53.0	
Approach LOS		F			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	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0				
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	24.0	8.0	24.3	17.0	19.2				
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			59.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Future Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
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		0.98	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.3	7.8	21.7	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.3	7.8	21.7	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.13	0.84	0.84	0.95	0.00	1.24	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.1	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	86.7	18.0	27.8	29.1	0.0	152.7	0.8	0.1	8.2	38.8	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	3.7	19.1	8.2	5.2	14.9	0.0	10.1	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	122.2	52.1	67.3	61.9	0.0	193.9	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		908			608			1092			1634	
Approach Delay, s/veh		94.6			63.3			51.8			64.2	
Approach LOS		F			E			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	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7				
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	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2				
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.7				
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			67.4									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Future Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	823	156	107	651	4	178	0	193	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	928	176	134	1612	10	645	0	546	406	79	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1472	0	1568	820	226	0
Grp Volume(v), veh/h	0	490	489	107	319	336	178	0	193	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1472	0	1568	1045	0	0
Q Serve(g_s), s	0.0	14.8	14.8	3.5	6.8	6.8	0.0	0.0	5.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.8	14.8	3.5	6.8	6.8	4.0	0.0	5.0	4.0	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	645	0	546	484	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.28	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	645	0	546	484	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	24.6	8.9	8.9	12.9	0.0	13.2	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.5	10.3	0.3	0.3	1.1	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.1	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.0	33.0	34.8	9.3	9.3	13.9	0.0	15.0	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		979			762			371			11	
Approach Delay, s/veh		33.0			12.9			14.5			11.8	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5				
Max Q Clear Time (g_c+I1), s		7.0	5.5	16.8		6.0	0.0	8.8				
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			22.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
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	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	866	99	171	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	111	212	1478	7	573	5	489	307	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3110	356	1660	3380	16	1379	15	1509	655	858	0
Grp Volume(v), veh/h	1	479	486	171	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.1	15.1	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.1	15.1	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	212	724	761	578	0	489	585	0	0
V/C Ratio(X)	0.33	0.90	0.90	0.81	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	553	295	724	761	578	0	489	585	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.6	17.2	17.0	10.6	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.6	9.7	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.9	35.9	35.7	34.7	11.4	11.4	14.5	0.0	15.1	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		966			790			212			2	
Approach Delay, s/veh		35.8			16.4			14.8			13.0	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	11.8	22.2		22.9	4.6	29.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		5.0	7.7	17.1		4.5	2.0	9.1				
Green Ext Time (p_c), s		0.7	0.1	0.5		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			25.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Future Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
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	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	419	363	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1763	1530	1757	1845	1568
Grp Volume(v), veh/h	609	512	478	299	660	0	608	284	263	224	427	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	10.2	16.7	0.0
Cycle Q Clear(g_c), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	10.2	16.7	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.98	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.97	0.76	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.6	25.1	0.0
Incr Delay (d2), s/veh	30.0	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	11.0	51.0	9.1	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	9.3	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.5	8.2	9.9	0.0
LnGrp Delay(d),s/veh	62.6	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	39.0	85.6	34.2	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	F	C	
Approach Vol, veh/h		1599			959			1155			651	
Approach Delay, s/veh		67.8			107.8			1135.7			51.9	
Approach LOS		E			F			F			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	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5				
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	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0				
Max Q Clear Time (g_c+I1), s	12.2	14.4	11.5	25.0	7.0	18.7	16.1	16.6				
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			356.8									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary 12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Future Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	746	284	384	578	486	72	830	383	329	1526	470
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	7.3	7.4	8.3	14.7	12.6	12.8	2.0	15.7	18.1	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.3	7.4	8.3	14.7	12.6	12.8	2.0	15.7	18.1	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	746	284	384	578	486	72	830	383	329	1526	470
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.62	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	821	313	400	588	495	135	830	383	333	1526	470
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	33.4	27.1	27.4	29.6	22.8	22.9	36.7	28.0	29.0	34.2	22.9	21.2
Incr Delay (d2), s/veh	16.0	0.5	2.0	22.2	1.9	2.4	9.1	11.4	37.9	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.6	3.3	9.6	6.8	5.8	1.2	8.6	11.9	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.4	27.6	29.4	51.8	24.7	25.2	45.8	39.4	66.9	43.5	24.4	23.2
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		711			1005			1131			1266	
Approach Delay, s/veh		33.2			34.2			48.7			28.0	
Approach LOS		C			C			D			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	11.9	23.5	21.3	20.8	7.6	27.8	13.6	28.6				
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	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5				
Max Q Clear Time (g_c+I1), s	7.4	20.1	16.7	10.3	4.0	13.0	9.3	14.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			36.1									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Apts AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Future Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	254	587	101	180	685	112	90	773	157	202	1081	163
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	803	138	220	771	126	202	956	423	272	1305	197
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3018	518	1774	3043	497	3408	3505	1551	3442	4460	672
Grp Volume(v), veh/h	254	344	344	180	398	399	90	773	157	202	821	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1770	1704	1752	1551	1721	1695	1742
Q Serve(g_s), s	9.5	12.3	12.4	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.8	15.8
Cycle Q Clear(g_c), s	9.5	12.3	12.4	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.8	15.8
Prop In Lane	1.00		0.29	1.00		0.28	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	242	471	470	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.05	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
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(l)	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	30.1	23.3	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	71.5	5.7	5.8	20.2	18.6	18.8	1.5	7.3	2.5	10.5	7.9	14.4
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	9.4	6.8	6.8	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.6
LnGrp Delay(d),s/veh	101.5	28.9	29.1	50.0	43.6	43.8	33.2	30.9	23.0	41.9	30.9	37.4
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		942			977			1020			1446	
Approach Delay, s/veh		48.6			44.9			29.9			34.4	
Approach LOS		D			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	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1				
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	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0				
Max Q Clear Time (g_c+l1), s	6.0	16.3	8.9	14.4	3.8	17.8	11.5	17.1				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.2	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.7									
HCM 2010 LOS			D									

HCM Signalized Intersection Capacity Analysis

1: W Laurel Dr & Adams St

Cumulative Plus Project Apts PM

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		 	 			
Traffic Volume (vph)	482	1435	994	30	40	293
Future Volume (vph)	482	1435	994	30	40	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	257	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	487	1449	1004	30	40	296
RTOR Reduction (vph)	0	0	0	0	0	225
Lane Group Flow (vph)	487	1449	1034	0	40	71
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.7	59.7	38.7		20.0	20.0
Effective Green, g (s)	60.4	60.8	39.8		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	464	2407	1560		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.05	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.8	7.4	19.1		26.6	26.9
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	48.3	0.3	1.2		0.1	0.2
Delay (s)	73.6	4.3	20.3		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.7	20.3		27.0	
Approach LOS		C	C		C	
Intersection Summary						
HCM 2000 Control Delay			21.8		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			88.5		Sum of lost time (s)	11.6
Intersection Capacity Utilization			71.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NB 101 Ramps & W Laurel Dr

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑		↑	↑	↑			
Traffic Volume (vph)	0	1549	0	0	1023	264	577	0	369	0	0	0
Future Volume (vph)	0	1549	0	0	1023	264	577	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3359		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3359		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1631	0	0	1077	278	607	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1631	0	0	1355	0	303	304	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.7			38.7		20.0	20.0	20.0			
Effective Green, g (s)		60.8			39.8		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2394			1510		387	387	364			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.90		0.78	0.79	0.91			
Uniform Delay, d1		8.1			22.5		31.8	31.8	33.0			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.9			6.3		9.9	10.1	25.4			
Delay (s)		9.0			15.2		41.7	41.9	58.4			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			15.2			48.3			0.0	
Approach LOS		A			B			D			A	
Intersection Summary												
HCM 2000 Control Delay			20.9			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			88.5			Sum of lost time (s)			12.3			
Intersection Capacity Utilization			72.3%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 Signalized Intersection Summary

3: W Laurel Dr & SB 101 Offramp

Cumulative Plus Project Apts PM

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	1609	1453	0	486	420		
Future Volume (veh/h)	0	1609	1453	0	486	420		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835		
Adj Flow Rate, veh/h	0	1659	1498	0	501	433		
Adj No. of Lanes	0	2	2	0	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1881	1881	0	1091	502		
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32		
Sat Flow, veh/h	0	3670	3670	0	3390	1560		
Grp Volume(v), veh/h	0	1659	1498	0	501	433		
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560		
Q Serve(g_s), s	0.0	23.2	19.3	0.0	6.5	14.5		
Cycle Q Clear(g_c), s	0.0	23.2	19.3	0.0	6.5	14.5		
Prop In Lane	0.00			0.00	1.00	1.00		
Lane Grp Cap(c), veh/h	0	1881	1881	0	1091	502		
V/C Ratio(X)	0.00	0.88	0.80	0.00	0.46	0.86		
Avail Cap(c_a), veh/h	0	2126	2126	0	1122	516		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	11.2	10.3	0.0	15.0	17.7		
Incr Delay (d2), s/veh	0.0	4.0	1.7	0.0	0.2	13.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.9	9.6	0.0	3.1	8.0		
LnGrp Delay(d),s/veh	0.0	15.2	12.0	0.0	15.2	31.2		
LnGrp LOS		B	B		B	C		
Approach Vol, veh/h		1659	1498		934			
Approach Delay, s/veh		15.2	12.0		22.6			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		34.1		21.5		34.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		25.2		16.5		21.3		
Green Ext Time (p_c), s		3.8		0.4		4.2		
Intersection Summary								
HCM 2010 Ctrl Delay			15.7					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Future Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	725	567	0	31	616	1065	680	554	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	735	1224	808	57	845	1267	571	1246	92
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3308	244
Grp Volume(v), veh/h	52	212	221	725	567	0	31	616	1065	680	293	302
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.2	14.2	25.5	15.1	0.0	2.1	19.3	16.3	20.0	14.9	15.0
Cycle Q Clear(g_c), s	3.6	14.2	14.2	25.5	15.1	0.0	2.1	19.3	16.3	20.0	14.9	15.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	735	1224	808	57	845	1267	571	660	678
V/C Ratio(X)	0.74	0.71	0.72	0.99	0.46	0.00	0.55	0.73	0.84	1.19	0.44	0.45
Avail Cap(c_a), veh/h	99	657	680	735	1905	1112	88	998	1387	571	705	724
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(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	46.3	46.3	46.5	29.9	0.0	56.9	41.7	9.4	49.7	27.8	27.8
Incr Delay (d2), s/veh	8.8	6.6	6.5	29.8	0.6	0.0	3.0	2.2	4.5	102.4	0.5	0.5
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	1.9	7.2	7.4	14.9	7.3	0.0	1.1	9.6	7.0	17.5	7.3	7.5
LnGrp Delay(d),s/veh	65.3	53.0	52.8	76.2	30.4	0.0	59.9	43.9	13.9	152.0	28.3	28.3
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1292			1712			1275	
Approach Delay, s/veh		54.2			56.1			25.5			94.3	
Approach LOS		D			E			C			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	32.0	26.5	9.9	50.9	10.4	48.1	26.0	34.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0				
Max Q Clear Time (g_c+l1), s	27.5	16.2	4.1	17.0	5.6	17.1	22.0	21.3				
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.2				
Intersection Summary												
HCM 2010 Ctrl Delay			55.2									
HCM 2010 LOS			E									

HCM 2010 TWSC
5: Post Dr/EI Rancho Way & Calle Del Adobe

Cumulative Plus Project Apts PM

Intersection

Int Delay, s/veh 11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

HCM 2010 Signalized Intersection Summary

6: N Davis Rd & Post Dr/Commercial Dwy

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	119	12	191	134	1386	19	231	949	38
Future Volume (veh/h)	84	32	123	119	12	191	134	1386	19	231	949	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
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	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	120	12	193	135	1400	19	233	959	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1574	21	262	1264	562
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1620	162	1571	1774	5170	70	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	132	0	193	135	918	501	233	959	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.7	3.0	6.8	5.9	0.0	10.3	6.6	22.7	22.7	11.3	21.0	1.4
Cycle Q Clear(g_c), s	2.7	3.0	6.8	5.9	0.0	10.3	6.6	22.7	22.7	11.3	21.0	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1032	563	262	1264	562
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.89	0.89	0.89	0.76	0.07
Avail Cap(c_a), veh/h	400	420	352	507	0	447	262	1080	589	262	1264	562
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	35.7	37.4	32.9	0.0	35.4	38.9	29.2	29.2	36.7	24.9	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.1	9.1	15.1	28.7	2.7	0.1
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	1.3	1.6	3.1	3.0	0.0	4.8	3.7	11.9	13.9	7.7	10.7	0.6
LnGrp Delay(d),s/veh	36.3	36.6	42.2	34.1	0.0	40.4	48.1	38.2	44.2	65.4	27.7	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			325			1554			1230	
Approach Delay, s/veh		39.3			37.8			41.0			34.5	
Approach LOS		D			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		16.1	14.4	37.4		20.0	19.0	32.8				
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0				
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0				
Max Q Clear Time (g_c+I1), s		8.8	8.6	23.0		12.3	13.3	24.7				
Green Ext Time (p_c), s		0.7	0.2	2.2		1.1	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			38.2									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Future Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
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	520	126	233	460	136	232	258	868	715	127	708	452
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	156	289	523	271	230	226	1236	553	154	642	408
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	587	1085	3442	1863	1583	1774	3539	1583	1774	2078	1321
Grp Volume(v), veh/h	520	0	359	460	136	232	258	868	715	127	603	557
Grp Sat Flow(s),veh/h/ln	1774	0	1671	1721	1863	1583	1774	1770	1583	1774	1770	1630
Q Serve(g_s), s	30.0	0.0	22.1	14.4	7.4	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	22.1	14.4	7.4	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	504
V/C Ratio(X)	1.07	0.00	0.81	0.88	0.50	1.01	1.14	0.70	1.29	0.82	1.10	1.11
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	504
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(l)	1.00	0.00	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	40.0	0.0	37.7	45.7	43.3	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	62.5	0.0	10.5	14.2	1.5	61.2	103.7	3.3	144.8	23.2	69.3	72.6
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	23.0	0.0	11.5	7.9	3.9	10.9	13.3	11.9	38.9	4.8	27.1	25.4
LnGrp Delay(d),s/veh	102.5	0.0	48.2	59.9	44.8	108.2	151.7	34.2	180.6	72.6	107.3	110.6
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		879			828			1841			1287	
Approach Delay, s/veh		80.3			70.9			107.5			105.3	
Approach LOS		F			E			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	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0				
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	24.1	16.0	36.0	32.0	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.8	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			95.7									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.4	5.9	19.0	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.4	5.9	19.0	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.13	0.50	0.80	0.99	0.00	1.11	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.2	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	86.0	1.2	24.0	42.6	0.0	89.6	27.9	0.1	24.2	1.6	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	8.9	19.0	3.7	3.9	14.4	0.0	11.9	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	121.4	32.5	64.4	77.7	0.0	128.3	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		958			513			1769			1077	
Approach Delay, s/veh		128.9			74.7			64.2			31.5	
Approach LOS		F			E			E			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	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7				
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	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2				
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	21.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			71.6									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1098	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1096	144	109	1733	10	581	12	509	430	11	65
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1368	35	1524	942	32	195
Grp Volume(v), veh/h	0	617	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1403	0	1524	1168	0	0
Q Serve(g_s), s	0.0	20.9	20.9	2.9	6.8	6.8	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.9	20.9	2.9	6.8	6.8	2.1	0.0	4.4	2.1	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	593	0	509	505	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.15	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	593	0	509	505	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.2	18.2	26.4	8.6	8.6	13.4	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	36.3	36.9	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.8	16.1	1.7	3.1	3.3	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	54.5	55.0	37.9	8.8	8.8	13.9	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		F	F	D	A	A	B		B	B		
Approach Vol, veh/h		1242			751			247			6	
Approach Delay, s/veh		54.7			12.1			15.1			12.8	
Approach LOS		D			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4				
Max Q Clear Time (g_c+I1), s		6.4	4.9	22.9		4.1	0.0	8.8				
Green Ext Time (p_c), s		0.8	0.0	0.0		0.0	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			36.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
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	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	915	241	399	1983	0	418	0	367	0	470	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2668	702	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	654	646	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1667	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.4	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.4	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.42	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	584	572	399	1983	0	418	0	367	0	470	0
V/C Ratio(X)	0.43	1.12	1.13	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	584	572	462	1983	0	418	0	367	0	470	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.4	25.4	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	74.6	78.3	17.8	0.1	0.0	1.0	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.5	24.5	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	100.0	103.6	46.7	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1301			1054			143			3	
Approach Delay, s/veh		101.8			21.7			23.8			21.6	
Approach LOS		F			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		24.0	22.2	31.0		24.0	4.6	48.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.8	17.4	28.5		2.1	2.0	10.3				
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5				
Intersection Summary												
HCM 2010 Ctrl Delay			63.5									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Future Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
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	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	581	522	489	365	833	0	312	391	760	296	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.08	0.96	0.96	2.56	1.03	0.00	2.79	0.92	1.99	1.17	0.46	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.4	30.3	34.3	21.5	0.0
Incr Delay (d2), s/veh	62.3	29.6	30.9	720.8	38.9	0.0	827.9	26.8	454.1	111.2	2.5	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	15.8	14.9	31.7	13.3	0.0	28.2	11.5	56.6	13.3	5.2	0.0
LnGrp Delay(d),s/veh	96.1	56.9	58.2	757.6	69.6	0.0	865.4	56.2	484.4	145.5	24.0	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1592			1198			1463			568	
Approach Delay, s/veh		71.6			279.2			451.2			87.3	
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	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0				
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	19.5	6.5	24.5	5.1	25.9	12.5	18.5				
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.4	14.5	20.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			240.2									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Future Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
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		0.98	1.00		0.99	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	220	62	231	199	258	125	1452	261	203	1486	248
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	774	338	274	394	330	158	1278	229	267	1445	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1546	1774	1863	1561	1774	4323	775	3442	5085	1550
Grp Volume(v), veh/h	245	220	62	231	199	258	125	1138	575	203	1486	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1546	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	9.0	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.7
Cycle Q Clear(g_c), s	9.5	3.7	2.3	9.0	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	287	774	338	274	394	330	158	1003	505	267	1445	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.14	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	897	392	312	485	407	162	1003	505	267	1445	441
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	28.9	23.1	22.6	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.7
Incr Delay (d2), s/veh	20.1	0.2	0.3	16.8	1.0	7.7	22.4	73.4	83.9	12.1	31.2	5.1
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	6.2	1.8	1.0	5.6	3.5	5.4	3.4	20.0	21.6	2.4	13.5	4.7
LnGrp Delay(d),s/veh	49.0	23.3	22.8	46.0	25.7	34.1	54.1	98.4	108.9	44.2	56.6	26.8
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		527			688			1838			1937	
Approach Delay, s/veh		35.2			35.7			98.7			51.5	
Approach LOS		D			D			F			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	10.0	25.5	15.5	20.0	10.8	24.7	16.0	19.5				
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	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5				
Max Q Clear Time (g_c+I1), s	6.1	23.0	11.0	5.7	6.9	22.2	11.5	13.1				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			65.0									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary
13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Apts PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Future Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
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		0.99	1.00		0.99	1.00		0.98	1.00		0.98
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	130	818	112	633	627	633	163	1100	959	490	842	88
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	812	111	193	489	435	237	1062	463	366	1575	164
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3122	427	1774	1770	1575	3442	3539	1544	3442	4668	485
Grp Volume(v), veh/h	130	464	466	633	627	633	163	1100	959	490	610	320
Grp Sat Flow(s),veh/h/ln	1774	1770	1780	1774	1770	1575	1721	1770	1544	1721	1695	1763
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.1	22.1	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.1	22.1	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	164	460	463	193	489	435	237	1062	463	366	1144	595
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.28	1.46	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	489	435	237	1062	463	366	1144	595
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	35.5	29.6	29.6	35.7	29.0	29.0	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.8	43.9	43.8	1039.7	142.2	217.4	8.2	37.4	489.2	170.4	1.8	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	3.2	15.7	15.8	60.0	30.0	35.8	2.0	17.2	73.1	12.7	5.7	6.3
LnGrp Delay(d),s/veh	44.4	73.5	73.4	1075.4	171.2	246.3	44.6	65.4	517.2	206.2	23.2	24.9
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1060			1893			2222			1420	
Approach Delay, s/veh		69.9			498.6			258.9			86.7	
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	13.0	28.5	13.2	25.3	10.0	31.5	11.9	26.6				
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	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0				
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			260.3									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Future Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1088	511	0	21	359	1056	181	315	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1224	1542	806	46	712	1548	251	829	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.21	0.21	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3271	217
Grp Volume(v), veh/h	32	125	130	1088	511	0	21	359	1056	181	165	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Cycle Q Clear(g_c), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	194	199	1224	1542	806	46	712	1548	251	435	449
V/C Ratio(X)	0.54	0.64	0.65	0.89	0.33	0.00	0.45	0.50	0.68	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1274	2681	1316	107	1222	1948	307	658	678
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	41.3	41.3	29.4	17.7	0.0	47.0	34.5	3.9	44.3	30.2	30.2
Incr Delay (d2), s/veh	2.9	7.4	7.6	8.5	0.3	0.0	2.6	0.6	0.7	9.7	0.5	0.5
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	0.9	3.6	3.8	15.2	4.5	0.0	0.6	4.3	4.0	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.3	48.7	48.8	37.9	18.0	0.0	49.5	35.1	4.6	54.0	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1599			1436			517	
Approach Delay, s/veh		48.8			31.5			12.9			38.9	
Approach LOS		D			C			B			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	41.5	17.0	8.6	30.8	9.0	49.5	13.4	26.1				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	46.0	6.0	37.5	7.3	75.7	9.0	34.5				
Max Q Clear Time (g_c+l1), s	31.7	9.2	3.2	9.8	3.9	11.4	7.2	11.0				
Green Ext Time (p_c), s	3.8	2.3	0.0	1.3	0.0	5.9	0.2	8.5				
Intersection Summary												
HCM 2010 Ctrl Delay			26.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

7: N Davis Rd & W Rossi St

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Future Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
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	1863	1845	1845	1845	1863	1863	1863	1845	1845	1845
Adj Flow Rate, veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	382	415	352	487	469	399	172	955	653	195	995	445
Arrive On Green	0.11	0.22	0.22	0.14	0.25	0.25	0.10	0.27	0.27	0.11	0.28	0.28
Sat Flow, veh/h	3442	1863	1583	3408	1845	1568	1774	3539	1583	1757	3505	1568
Grp Volume(v), veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1704	1845	1568	1774	1770	1583	1757	1752	1568
Q Serve(g_s), s	6.5	10.2	6.1	8.0	13.0	8.6	4.7	8.9	10.7	6.1	11.6	9.5
Cycle Q Clear(g_c), s	6.5	10.2	6.1	8.0	13.0	8.6	4.7	8.9	10.7	6.1	11.6	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	415	352	487	469	399	172	955	653	195	995	445
V/C Ratio(X)	0.93	0.78	0.50	0.90	0.85	0.61	0.79	0.60	0.55	0.89	0.72	0.61
Avail Cap(c_a), veh/h	382	473	402	487	527	448	197	955	653	195	995	445
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	27.8	23.0	21.4	26.6	22.4	20.7	27.8	20.1	14.0	27.6	20.3	19.6
Incr Delay (d2), s/veh	29.3	7.0	1.1	19.6	11.7	2.0	17.2	2.8	3.3	35.2	4.5	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	4.6	6.1	2.8	5.0	8.1	3.9	3.1	4.7	5.2	4.9	6.2	4.9
LnGrp Delay(d),s/veh	57.1	30.1	22.5	46.1	34.1	22.7	45.0	22.9	17.3	62.8	24.9	25.7
LnGrp LOS	E	C	C	D	C	C	D	C	B	E	C	C
Approach Vol, veh/h		854			1081			1066			1163	
Approach Delay, s/veh		39.8			36.4			23.8			30.7	
Approach LOS		D			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	11.0	21.0	13.0	18.0	10.1	21.9	11.0	20.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	17.0	9.0	16.0	7.0	17.0	7.0	18.0				
Max Q Clear Time (g_c+I1), s	8.1	12.7	10.0	12.2	6.7	13.6	8.5	15.0				
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	1.8	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			32.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Future Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
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		0.99	1.00		1.00	1.00		0.99	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	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	237	453	380	172	503	428	206	1661	169	180	1727	0
Arrive On Green	0.07	0.24	0.24	0.10	0.27	0.00	0.12	0.35	0.35	0.10	0.34	0.00
Sat Flow, veh/h	3442	1863	1560	1757	1845	1568	1774	4687	477	1774	5253	0
Grp Volume(v), veh/h	189	443	276	156	452	0	186	593	313	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1560	1757	1845	1568	1774	1695	1774	1774	1695	0
Q Serve(g_s), s	4.8	21.0	14.4	7.8	20.9	0.0	9.2	12.2	12.3	7.1	24.3	0.0
Cycle Q Clear(g_c), s	4.8	21.0	14.4	7.8	20.9	0.0	9.2	12.2	12.3	7.1	24.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	237	453	380	172	503	428	206	1201	628	180	1727	0
V/C Ratio(X)	0.80	0.98	0.73	0.91	0.90	0.00	0.90	0.49	0.50	0.81	0.86	0.00
Avail Cap(c_a), veh/h	237	453	380	172	503	428	206	1201	628	294	1799	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	33.3	30.9	39.6	31.1	0.0	38.7	22.4	22.5	39.0	27.4	0.0
Incr Delay (d2), s/veh	17.4	36.2	6.8	42.7	18.9	0.0	37.3	0.3	0.6	8.2	4.4	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	2.9	15.3	6.9	5.8	13.3	0.0	6.6	5.7	6.1	3.9	12.0	0.0
LnGrp Delay(d),s/veh	58.1	69.5	37.7	82.3	49.9	0.0	76.0	22.7	23.1	47.2	31.8	0.0
LnGrp LOS	E	E	D	F	D		E	C	C	D	C	
Approach Vol, veh/h		908			608			1092			1634	
Approach Delay, s/veh		57.5			58.2			31.9			33.2	
Approach LOS		E			E			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	13.5	35.9	13.2	26.1	14.8	34.6	10.6	28.7				
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	14.7	27.0	8.7	21.6	10.3	31.4	6.1	24.2				
Max Q Clear Time (g_c+I1), s	9.1	14.3	9.8	23.0	11.2	26.3	6.8	22.9				
Green Ext Time (p_c), s	0.2	4.9	0.0	0.0	0.0	3.9	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			41.6									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Apts AM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Future Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
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	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	823	156	107	651	4	178	0	193	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	978	185	133	1661	10	626	0	529	389	75	0
Arrive On Green	0.00	0.34	0.34	0.08	0.50	0.50	0.34	0.00	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1474	0	1568	806	223	0
Grp Volume(v), veh/h	0	490	489	107	319	336	178	0	193	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1474	0	1568	1030	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.6	6.8	6.8	0.0	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.6	6.8	6.8	4.2	0.0	5.2	4.2	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	583	581	133	815	856	626	0	529	465	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.39	0.39	0.28	0.00	0.36	0.02	0.00	0.00
Avail Cap(c_a), veh/h	155	635	633	208	815	856	626	0	529	465	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.0	17.0	25.2	8.6	8.6	13.6	0.0	14.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	9.4	11.7	0.3	0.3	1.1	0.0	1.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	8.4	2.0	3.1	3.2	2.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	36.9	8.9	8.9	14.8	0.0	15.9	12.5	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		979			762			371			11	
Approach Delay, s/veh		26.4			12.8			15.4			12.5	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.3	9.1	23.4		23.3	0.0	32.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.8	7.1	20.6		18.8	5.0	22.7				
Max Q Clear Time (g_c+I1), s		7.2	5.6	16.7		6.2	0.0	8.8				
Green Ext Time (p_c), s		1.3	0.0	2.2		0.0	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			19.5									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Apts AM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
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	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	866	99	171	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	1034	463	213	1445	7	582	5	497	313	283	0
Arrive On Green	0.00	0.30	0.30	0.13	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3380	16	1378	15	1509	658	860	0
Grp Volume(v), veh/h	1	866	99	171	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1740	1393	0	1509	1518	0	0
Q Serve(g_s), s	0.0	13.2	2.7	5.6	7.1	7.1	0.0	0.0	2.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.2	2.7	5.6	7.1	7.1	2.4	0.0	2.9	2.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	1034	463	213	708	744	587	0	497	597	0	0
V/C Ratio(X)	0.32	0.84	0.21	0.80	0.43	0.43	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	154	1108	496	300	708	744	587	0	497	597	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.9	18.3	14.6	23.7	11.2	11.2	13.4	0.0	13.5	12.6	0.0	0.0
Incr Delay (d2), s/veh	51.7	5.5	0.2	10.1	0.4	0.4	0.7	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.9	1.2	3.2	3.3	3.4	1.2	0.0	1.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	79.5	23.7	14.8	33.8	11.6	11.6	14.0	0.0	14.6	12.6	0.0	0.0
LnGrp LOS	E	C	B	C	B	B	B		B	B		
Approach Vol, veh/h		966			790			212			2	
Approach Delay, s/veh		22.9			16.4			14.3			12.6	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	11.7	21.3		22.9	4.6	28.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1				
Max Q Clear Time (g_c+I1), s		4.9	7.6	15.2		4.4	2.0	9.1				
Green Ext Time (p_c), s		0.7	0.1	1.6		0.0	0.0	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay			19.3									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Future Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
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	1863	1827	1827	1827	1827	1827	1827	1845	1845	1845
Adj Flow Rate, veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	585	869	389	350	622	278	579	1280	573	252	1194	534
Arrive On Green	0.17	0.25	0.25	0.10	0.18	0.00	0.17	0.37	0.37	0.14	0.34	0.00
Sat Flow, veh/h	3442	3539	1583	3375	3471	1553	3375	3471	1553	1757	3505	1568
Grp Volume(v), veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1688	1736	1553	1688	1736	1553	1757	1752	1568
Q Serve(g_s), s	22.1	21.6	27.9	11.3	23.3	0.0	22.3	7.5	16.4	16.3	11.9	0.0
Cycle Q Clear(g_c), s	22.1	21.6	27.9	11.3	23.3	0.0	22.3	7.5	16.4	16.3	11.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	585	869	389	350	622	278	579	1280	573	252	1194	534
V/C Ratio(X)	1.04	0.74	0.90	0.85	1.06	0.00	1.05	0.23	0.45	0.89	0.36	0.00
Avail Cap(c_a), veh/h	585	869	389	382	622	278	579	1280	573	362	1194	534
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	45.2	47.5	57.3	53.4	0.0	53.8	28.3	31.1	54.6	32.2	0.0
Incr Delay (d2), s/veh	48.3	3.3	23.7	16.0	53.3	0.0	51.2	0.4	2.6	17.0	0.8	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	14.4	11.0	14.8	6.1	15.8	0.0	14.5	3.6	7.4	9.1	5.9	0.0
LnGrp Delay(d),s/veh	102.2	48.4	71.2	73.3	106.6	0.0	105.1	28.7	33.6	71.6	33.0	0.0
LnGrp LOS	F	D	E	E	F		F	C	C	E	C	
Approach Vol, veh/h		1599			959			1155			651	
Approach Delay, s/veh		73.9			96.2			70.0			46.3	
Approach LOS		E			F			E			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	23.2	52.4	18.0	36.4	26.8	48.8	26.6	27.8				
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	26.8	39.8	14.7	30.7	22.3	44.3	22.1	23.3				
Max Q Clear Time (g_c+I1), s	18.3	18.4	13.3	29.9	24.3	13.9	24.1	25.3				
Green Ext Time (p_c), s	0.4	2.7	0.2	0.5	0.0	3.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			73.7									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Future Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	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		0.85	1.00		0.99	1.00		0.99	1.00		0.99
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	745	284	384	577	486	72	855	395	306	1529	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.3	7.4	8.3	14.7	12.7	12.8	2.0	15.5	18.0	5.5	11.0	6.2
Cycle Q Clear(g_c), s	7.3	7.4	8.3	14.7	12.7	12.8	2.0	15.5	18.0	5.5	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	745	284	384	577	486	72	855	395	306	1529	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.62	0.62	0.64	0.84	0.94	0.81	0.56	0.34
Avail Cap(c_a), veh/h	253	820	312	400	585	492	114	855	395	306	1529	471
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	33.5	27.1	27.5	29.6	22.9	22.9	36.7	27.5	28.4	34.8	22.9	21.2
Incr Delay (d2), s/veh	15.7	0.5	2.0	22.3	1.9	2.4	9.1	9.5	31.8	15.1	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.3	9.6	6.8	5.8	1.2	8.4	11.2	3.3	5.4	3.0
LnGrp Delay(d),s/veh	49.2	27.7	29.5	51.9	24.8	25.3	45.8	37.0	60.2	49.9	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		711			1005			1131			1266	
Approach Delay, s/veh		33.2			34.3			45.0			29.2	
Approach LOS		C			C			D			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	11.4	24.1	21.3	20.9	7.6	27.9	13.6	28.6				
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	6.9	19.6	17.5	18.0	5.0	21.5	11.1	24.4				
Max Q Clear Time (g_c+l1), s	7.5	20.0	16.7	10.3	4.0	13.0	9.3	14.8				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	4.1	0.1	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			35.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Apts AM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Future Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
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		0.99	1.00		0.99	1.00		0.99	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	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	254	587	101	180	685	112	90	773	157	202	1081	163
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	292	865	148	218	745	122	185	1022	452	251	1383	208
Arrive On Green	0.16	0.29	0.29	0.12	0.24	0.24	0.05	0.29	0.29	0.07	0.31	0.31
Sat Flow, veh/h	1774	3018	518	1774	3043	497	3408	3505	1552	3442	4460	672
Grp Volume(v), veh/h	254	344	344	180	398	399	90	773	157	202	821	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1770	1704	1752	1552	1721	1695	1742
Q Serve(g_s), s	11.1	13.7	13.8	7.9	17.4	17.5	2.0	16.0	6.3	4.6	17.6	17.6
Cycle Q Clear(g_c), s	11.1	13.7	13.8	7.9	17.4	17.5	2.0	16.0	6.3	4.6	17.6	17.6
Prop In Lane	1.00		0.29	1.00		0.28	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	292	507	506	218	433	433	185	1022	452	251	1051	540
V/C Ratio(X)	0.87	0.68	0.68	0.83	0.92	0.92	0.49	0.76	0.35	0.81	0.78	0.78
Avail Cap(c_a), veh/h	301	507	506	259	434	434	218	1022	452	251	1051	540
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	32.4	25.1	25.2	34.1	29.3	29.3	36.6	25.6	22.2	36.3	25.0	25.0
Incr Delay (d2), s/veh	22.5	3.6	3.7	16.9	24.5	24.8	2.0	5.2	2.1	17.2	5.8	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	7.2	7.2	4.9	11.5	11.5	1.0	8.5	3.0	2.8	9.1	10.1
LnGrp Delay(d),s/veh	54.9	28.7	28.8	51.0	53.8	54.0	38.5	30.9	24.3	53.6	30.8	35.8
LnGrp LOS	D	C	C	D	D	D	D	C	C	D	C	D
Approach Vol, veh/h		942			977			1020			1446	
Approach Delay, s/veh		35.8			53.4			30.5			35.4	
Approach LOS		D			D			C			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	10.3	27.7	14.3	27.3	8.8	29.2	17.6	24.0				
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	5.8	23.2	11.6	21.4	5.1	23.9	13.5	19.5				
Max Q Clear Time (g_c+I1), s	6.6	18.0	9.9	15.8	4.0	19.6	13.1	19.5				
Green Ext Time (p_c), s	0.0	2.6	0.1	2.1	0.0	2.9	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			38.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

4: N Davis Rd & Calle Del Adobe/W Laurel Dr

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Future Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	725	567	0	31	616	1065	680	554	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	679	1166	808	57	845	1220	628	1301	96
Arrive On Green	0.04	0.18	0.18	0.20	0.34	0.00	0.03	0.24	0.24	0.18	0.39	0.40
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3308	244
Grp Volume(v), veh/h	52	212	221	725	567	0	31	616	1065	680	293	302
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.2	14.2	24.0	15.5	0.0	2.1	19.3	17.6	22.0	14.5	14.6
Cycle Q Clear(g_c), s	3.6	14.2	14.2	24.0	15.5	0.0	2.1	19.3	17.6	22.0	14.5	14.6
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	679	1166	808	57	845	1220	628	689	708
V/C Ratio(X)	0.74	0.71	0.72	1.07	0.49	0.00	0.55	0.73	0.87	1.08	0.43	0.43
Avail Cap(c_a), veh/h	147	657	680	679	1748	1068	88	998	1341	628	734	754
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	46.3	46.3	47.7	31.4	0.0	56.9	41.7	10.2	48.7	26.4	26.3
Incr Delay (d2), s/veh	5.8	6.6	6.5	54.3	0.7	0.0	3.0	2.2	6.2	60.3	0.4	0.4
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	1.8	7.2	7.4	16.2	7.5	0.0	1.1	9.6	7.6	15.6	7.1	7.3
LnGrp Delay(d),s/veh	62.3	53.0	52.8	101.9	32.1	0.0	59.9	43.9	16.3	109.0	26.8	26.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1292			1712			1275	
Approach Delay, s/veh		53.9			71.3			27.0			70.6	
Approach LOS		D			E			C			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	30.0	26.5	9.9	52.9	10.4	46.1	28.0	34.8				
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0				
Max Green Setting (Gmax), s	24.0	46.5	6.0	50.0	10.4	60.1	22.0	34.0				
Max Q Clear Time (g_c+I1), s	26.0	16.2	4.1	16.6	5.6	17.5	24.0	21.3				
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.5	0.0	7.2				
Intersection Summary												
HCM 2010 Ctrl Delay			53.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
7: N Davis Rd & W Rossi St

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Future Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	520	126	233	460	136	232	258	868	715	127	708	452
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	576	345	293	549	330	281	297	1234	805	148	938	420
Arrive On Green	0.17	0.18	0.18	0.16	0.18	0.18	0.17	0.35	0.35	0.08	0.26	0.26
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	520	126	233	460	136	232	258	868	715	127	708	452
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.6	4.2	10.1	9.3	4.6	10.1	10.2	15.2	25.0	5.1	13.2	19.0
Cycle Q Clear(g_c), s	10.6	4.2	10.1	9.3	4.6	10.1	10.2	15.2	25.0	5.1	13.2	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	576	345	293	549	330	281	297	1234	805	148	938	420
V/C Ratio(X)	0.90	0.37	0.80	0.84	0.41	0.83	0.87	0.70	0.89	0.86	0.76	1.08
Avail Cap(c_a), veh/h	576	416	353	576	416	353	297	1234	805	148	938	420
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(l)	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	29.3	25.5	27.9	29.2	26.2	28.4	29.1	20.2	15.8	32.4	24.2	26.4
Incr Delay (d2), s/veh	17.6	0.6	10.0	10.1	0.8	12.2	23.0	3.4	14.0	35.8	5.6	66.2
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	6.5	2.2	5.2	5.2	2.5	5.3	6.8	7.9	15.7	3.9	7.1	16.0
LnGrp Delay(d),s/veh	46.9	26.2	38.0	39.4	27.0	40.7	52.1	23.5	29.8	68.3	29.8	92.6
LnGrp LOS	D	C	D	D	C	D	D	C	C	E	C	F
Approach Vol, veh/h		879			828			1841			1287	
Approach Delay, s/veh		41.5			37.7			30.0			55.7	
Approach LOS		D			D			C			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	10.0	29.0	15.4	17.3	16.0	23.0	16.0	16.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	6.0	25.0	12.0	16.0	12.0	19.0	12.0	16.0				
Max Q Clear Time (g_c+l1), s	7.1	27.0	11.3	12.1	12.2	21.0	12.6	12.1				
Green Ext Time (p_c), s	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			40.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
8: N Main St (SR 183) & W Rossi St/E Rossi St

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							  			  	
Traffic Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
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		0.98	1.00		1.00	1.00		0.98	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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	502	420	148	434	369	302	1588	110	203	1382	0
Arrive On Green	0.12	0.27	0.27	0.08	0.23	0.00	0.17	0.33	0.33	0.11	0.27	0.00
Sat Flow, veh/h	3442	1863	1557	1774	1863	1583	1774	4849	335	1774	5253	0
Grp Volume(v), veh/h	348	445	165	118	395	0	267	982	520	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1557	1774	1863	1583	1774	1695	1794	1774	1695	0
Q Serve(g_s), s	8.7	20.1	7.6	5.7	18.1	0.0	12.9	24.1	24.1	8.2	13.9	0.0
Cycle Q Clear(g_c), s	8.7	20.1	7.6	5.7	18.1	0.0	12.9	24.1	24.1	8.2	13.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	412	502	420	148	434	369	302	1110	588	203	1382	0
V/C Ratio(X)	0.84	0.89	0.39	0.80	0.91	0.00	0.88	0.88	0.88	0.83	0.66	0.00
Avail Cap(c_a), veh/h	412	520	435	152	457	388	314	1140	603	212	1421	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	30.7	26.2	39.5	32.7	0.0	35.5	27.9	27.9	38.0	28.3	0.0
Incr Delay (d2), s/veh	14.8	16.3	0.6	24.9	21.5	0.0	23.9	8.4	14.4	23.0	1.1	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	5.0	12.5	3.3	3.8	11.9	0.0	8.3	12.5	14.2	5.3	6.6	0.0
LnGrp Delay(d),s/veh	52.6	47.0	26.8	64.4	54.2	0.0	59.5	36.3	42.3	61.1	29.4	0.0
LnGrp LOS	D	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		958			513			1769			1077	
Approach Delay, s/veh		45.6			56.6			41.6			34.4	
Approach LOS		D			E			D			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	14.5	33.2	11.8	28.2	19.4	28.3	15.0	24.9				
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	10.5	29.5	7.5	24.5	15.5	24.5	10.5	21.5				
Max Q Clear Time (g_c+l1), s	10.2	26.1	7.7	22.1	14.9	15.9	10.7	20.1				
Green Ext Time (p_c), s	0.0	2.7	0.0	0.8	0.1	4.0	0.0	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			42.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 9: Davis SB Ramps/Market Cir & W Market St (SR 183)

Cumulative Plus Project Apts PM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
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	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1098	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1227	161	106	1854	11	542	11	475	395	10	60
Arrive On Green	0.00	0.41	0.41	0.06	0.54	0.54	0.31	0.31	0.31	0.31	0.00	0.31
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1372	35	1524	929	31	192
Grp Volume(v), veh/h	0	617	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1407	0	1524	1152	0	0
Q Serve(g_s), s	0.0	21.3	21.4	3.1	6.9	6.9	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.3	21.4	3.1	6.9	6.9	2.4	0.0	4.9	2.4	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	690	698	106	909	955	553	0	475	465	0	0
V/C Ratio(X)	0.00	0.89	0.90	0.80	0.36	0.36	0.16	0.00	0.33	0.01	0.00	0.00
Avail Cap(c_a), veh/h	135	715	723	147	909	955	553	0	475	465	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)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.2	17.2	28.9	8.1	8.1	15.6	0.0	16.5	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	13.5	13.6	18.9	0.2	0.2	0.6	0.0	1.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.3	12.5	2.0	3.2	3.4	1.2	0.0	2.3	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	30.7	30.9	47.8	8.3	8.3	16.3	0.0	18.4	14.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1242			751			247			6	
Approach Delay, s/veh		30.8			12.8			17.6			14.9	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.0	8.5	30.1		24.0	0.0	38.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	5.5	26.5		19.5	5.0	27.0				
Max Q Clear Time (g_c+I1), s		6.9	5.1	23.4		4.4	0.0	8.9				
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	3.9				
Intersection Summary												
HCM 2010 Ctrl Delay			23.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 10: Davis NB Ramps/Private Dwy & W Market St (SR 183)

Cumulative Plus Project Apts PM
 With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
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	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	1149	513	400	1964	0	424	0	372	0	476	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.26	0.00	0.26	0.00	0.26	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	21.9	11.0	15.2	8.3	0.0	3.6	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	21.9	11.0	15.2	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	1149	513	400	1964	0	424	0	372	0	476	0
V/C Ratio(X)	0.43	0.90	0.53	0.89	0.35	0.00	0.18	0.00	0.17	0.00	0.01	0.00
Avail Cap(c_a), veh/h	112	1184	529	468	1964	0	424	0	372	0	476	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	24.0	20.4	28.4	9.0	0.0	22.5	0.0	22.1	0.0	21.2	0.0
Incr Delay (d2), s/veh	91.0	8.9	0.9	17.2	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.7	4.7	9.2	4.0	0.0	1.4	0.0	1.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	129.1	32.9	21.3	45.7	9.1	0.0	23.5	0.0	23.1	0.0	21.2	0.0
LnGrp LOS	F	C	C	D	A		C		C		C	
Approach Vol, veh/h		1301			1054			143			3	
Approach Delay, s/veh		30.6			21.5			23.3			21.2	
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		24.0	22.0	30.2		24.0	4.6	47.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0				
Max Q Clear Time (g_c+I1), s		5.7	17.2	23.9		2.1	2.0	10.3				
Green Ext Time (p_c), s		0.4	0.4	1.9		0.0	0.0	5.5				
Intersection Summary												
HCM 2010 Ctrl Delay			26.3									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: Davis Rd & Blanco Rd

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Future Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
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	1863	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	560	925	413	426	784	351	373	1013	453	283	1194	534
Arrive On Green	0.16	0.26	0.26	0.12	0.22	0.00	0.11	0.29	0.29	0.16	0.34	0.00
Sat Flow, veh/h	3442	3539	1582	3408	3505	1568	3408	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1582	1704	1752	1568	1704	1752	1568	1757	1752	1568
Q Serve(g_s), s	17.9	18.9	22.6	11.5	24.6	0.0	9.9	9.8	31.8	17.7	6.1	0.0
Cycle Q Clear(g_c), s	17.9	18.9	22.6	11.5	24.6	0.0	9.9	9.8	31.8	17.7	6.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	560	925	413	426	784	351	373	1013	453	283	1194	534
V/C Ratio(X)	1.04	0.72	0.83	0.86	1.06	0.00	0.84	0.39	1.68	1.05	0.23	0.00
Avail Cap(c_a), veh/h	560	925	413	462	784	351	409	1013	453	283	1194	534
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.1	37.0	38.3	47.2	42.7	0.0	48.0	31.3	39.1	46.2	25.9	0.0
Incr Delay (d2), s/veh	48.1	2.8	13.5	14.0	50.1	0.0	13.2	1.1	314.0	66.4	0.4	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	12.2	9.5	11.4	6.3	17.3	0.0	5.3	4.9	53.3	13.8	3.0	0.0
LnGrp Delay(d),s/veh	94.1	39.7	51.8	61.1	92.8	0.0	61.2	32.4	353.1	112.5	26.4	0.0
LnGrp LOS	F	D	D	E	F		E	C	F	F	C	
Approach Vol, veh/h	1592				1198			1463			568	
Approach Delay, s/veh	62.2				83.2			205.2			71.3	
Approach LOS	E				F			F			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	36.3	18.2	33.3	16.5	42.0	22.4	29.1				
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	17.7	31.8	14.9	27.6	13.2	36.3	17.9	24.6				
Max Q Clear Time (g_c+I1), s	19.7	33.8	13.5	24.6	11.9	8.1	19.9	26.6				
Green Ext Time (p_c), s	0.0	0.0	0.2	1.7	0.2	1.8	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	111.9											
HCM 2010 LOS	F											

HCM 2010 Signalized Intersection Summary

12: N Main St & W Alvin Dr/E Alvin Dr

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 						  		 	  	
Traffic Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Future Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	220	62	231	199	258	125	1452	261	203	1486	248
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	709	309	265	358	299	150	1614	290	253	1840	563
Arrive On Green	0.16	0.20	0.20	0.15	0.19	0.19	0.08	0.37	0.37	0.07	0.36	0.36
Sat Flow, veh/h	1774	3539	1543	1774	1863	1559	1774	4326	776	3442	5085	1557
Grp Volume(v), veh/h	245	220	62	231	199	258	125	1137	576	203	1486	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1543	1774	1863	1559	1774	1695	1712	1721	1695	1557
Q Serve(g_s), s	11.9	4.7	3.0	11.3	8.5	14.2	6.1	28.0	28.1	5.1	23.3	10.7
Cycle Q Clear(g_c), s	11.9	4.7	3.0	11.3	8.5	14.2	6.1	28.0	28.1	5.1	23.3	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	280	709	309	265	358	299	150	1265	639	253	1840	563
V/C Ratio(X)	0.88	0.31	0.20	0.87	0.56	0.86	0.83	0.90	0.90	0.80	0.81	0.44
Avail Cap(c_a), veh/h	291	760	331	271	379	317	150	1265	639	253	1840	563
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	36.4	30.2	29.5	36.8	32.3	34.6	39.8	26.1	26.2	40.3	25.4	21.4
Incr Delay (d2), s/veh	23.9	0.2	0.3	24.6	1.6	20.0	30.8	10.3	18.2	16.8	3.9	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	2.3	1.3	7.3	4.5	7.7	4.3	14.9	16.5	3.0	11.5	5.0
LnGrp Delay(d),s/veh	60.3	30.4	29.8	61.4	33.9	54.6	70.6	36.5	44.4	57.1	29.4	23.9
LnGrp LOS	E	C	C	E	C	D	E	D	D	E	C	C
Approach Vol, veh/h		527			688			1838			1937	
Approach Delay, s/veh		44.2			50.9			41.3			31.6	
Approach LOS		D			D			D			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	11.0	37.5	17.7	22.2	12.0	36.5	18.4	21.5				
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	6.5	33.0	13.5	19.0	7.5	32.0	14.5	18.0				
Max Q Clear Time (g_c+I1), s	7.1	30.1	13.3	6.7	8.1	25.3	13.9	16.2				
Green Ext Time (p_c), s	0.0	2.4	0.0	1.2	0.0	5.2	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			39.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

13: N Main St & W Laurel Dr/E Laurel Dr

Cumulative Plus Project Apts PM
With Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Future Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
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		0.98	1.00		1.00	1.00		0.97	1.00		0.98
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	130	818	112	633	627	633	163	1100	959	490	842	88
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	657	90	450	674	600	213	1049	457	381	1612	168
Arrive On Green	0.08	0.21	0.21	0.25	0.38	0.38	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3120	427	1774	1770	1577	3442	3539	1543	3442	4668	485
Grp Volume(v), veh/h	130	464	466	633	627	633	163	1100	959	490	610	320
Grp Sat Flow(s),veh/h/ln	1774	1770	1778	1774	1770	1577	1721	1770	1543	1721	1695	1763
Q Serve(g_s), s	10.1	29.5	29.5	35.5	47.6	53.3	6.5	41.5	41.5	15.5	20.1	20.3
Cycle Q Clear(g_c), s	10.1	29.5	29.5	35.5	47.6	53.3	6.5	41.5	41.5	15.5	20.1	20.3
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	148	373	375	450	674	600	213	1049	457	381	1171	609
V/C Ratio(X)	0.88	1.24	1.24	1.41	0.93	1.05	0.77	1.05	2.10	1.29	0.52	0.52
Avail Cap(c_a), veh/h	148	373	375	450	674	600	288	1049	457	381	1171	609
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	63.4	55.3	55.3	52.3	41.6	43.4	64.7	49.3	49.3	62.2	36.6	36.6
Incr Delay (d2), s/veh	40.4	130.5	130.5	196.1	19.6	51.8	8.2	41.4	500.8	147.2	1.7	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	27.9	28.0	41.9	26.8	31.8	3.3	26.3	81.4	15.1	9.7	10.4
LnGrp Delay(d),s/veh	103.8	185.8	185.7	248.4	61.2	95.2	72.9	90.6	550.0	209.5	38.3	39.9
LnGrp LOS	F	F	F	F	E	F	E	F	F	F	D	D
Approach Vol, veh/h		1060			1893			2222			1420	
Approach Delay, s/veh		175.7			135.2			287.6			97.7	
Approach LOS		F			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	20.0	46.0	40.0	34.0	13.2	52.8	16.2	57.8				
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	15.5	41.5	35.5	29.5	11.7	45.3	11.7	53.3				
Max Q Clear Time (g_c+I1), s	17.5	43.5	37.5	31.5	8.5	22.3	12.1	55.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	6.6	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			185.0									
HCM 2010 LOS			F									

Appendix P

Monterey County

Regional Trip Length

Calculation

Average Monterey County Home-Based Trip Lengths				
RESIDENTIAL: HOME-BASED TRIPS				
	Home to Work	Home to Shopping	Home to Other	Weighted Average
Trip Length (miles)	10.8	7.3	7.5	
Percent of Total Trips	44.0%	18.8%	37.2%	100.0%
Total	4.8	1.4	2.8	8.9
Source: <i>California Emissions Estimator Model (CalEEMOd)</i> , Appendix D - Default Data Tables, pg D-85, for Monterey County, October 2017				