URBAN | CROSSROADS

VITALIA/REFUGE RESIDENTIAL

TRAFFIC ANALYSIS

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(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
DU	Dwelling Unit
EAP	Existing Plus Ambient Plus Project
EAPC	Existing Plus Ambient Plus Project Plus Cumulative
emp	Employee
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
PA	Planning Area
PHF	Peak Hour Factor
Project	Vitalia/Refuge Residential
sf	Square Feet
TA	Traffic Analysis

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1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for Vitalia/Refuge Residential ("Project"), located west of Rembrandt Parkway and south of Gerald Ford Drive in the City of Palm Desert, as shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and recommend improvements to achieve acceptable circulation system operational conditions. This TA has been prepared based in accordance with the County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020) as the City of Palm Desert utilizes the County guidelines. (1) To ensure that this TA satisfies the City of Palm Desert's traffic study requirements, Urban Crossroads, Inc. prepared a traffic study scoping package for review by City staff prior to the preparation of this report. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The Agreement approved by the City is included in Appendix 1.1.

1.1 SUMMARY OF FINDINGS

For Existing (2022) conditions, study area intersections experience acceptable operations.

The proposed Project is anticipated to require the construction of off-site improvements necessary to provide site access in conjunction with site development. These improvements should be in place prior to occupancy. Project access roadway segment improvements include construction of Street "A" (Rembrandt Parkway southerly extension) from Julie Drive to Gerald Ford Drive as a local collector (minimum pavement of 44'). Julie Drive shall be improved as a collector (52' pavement section) from its current terminus west of Portola Road to the PA2/PA3 local street intersection within the Project.

At the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection, 1 shared northbound left/through lane, 1 northbound right turn lane, 1 eastbound right turn lane, and 1 westbound left turn lane.

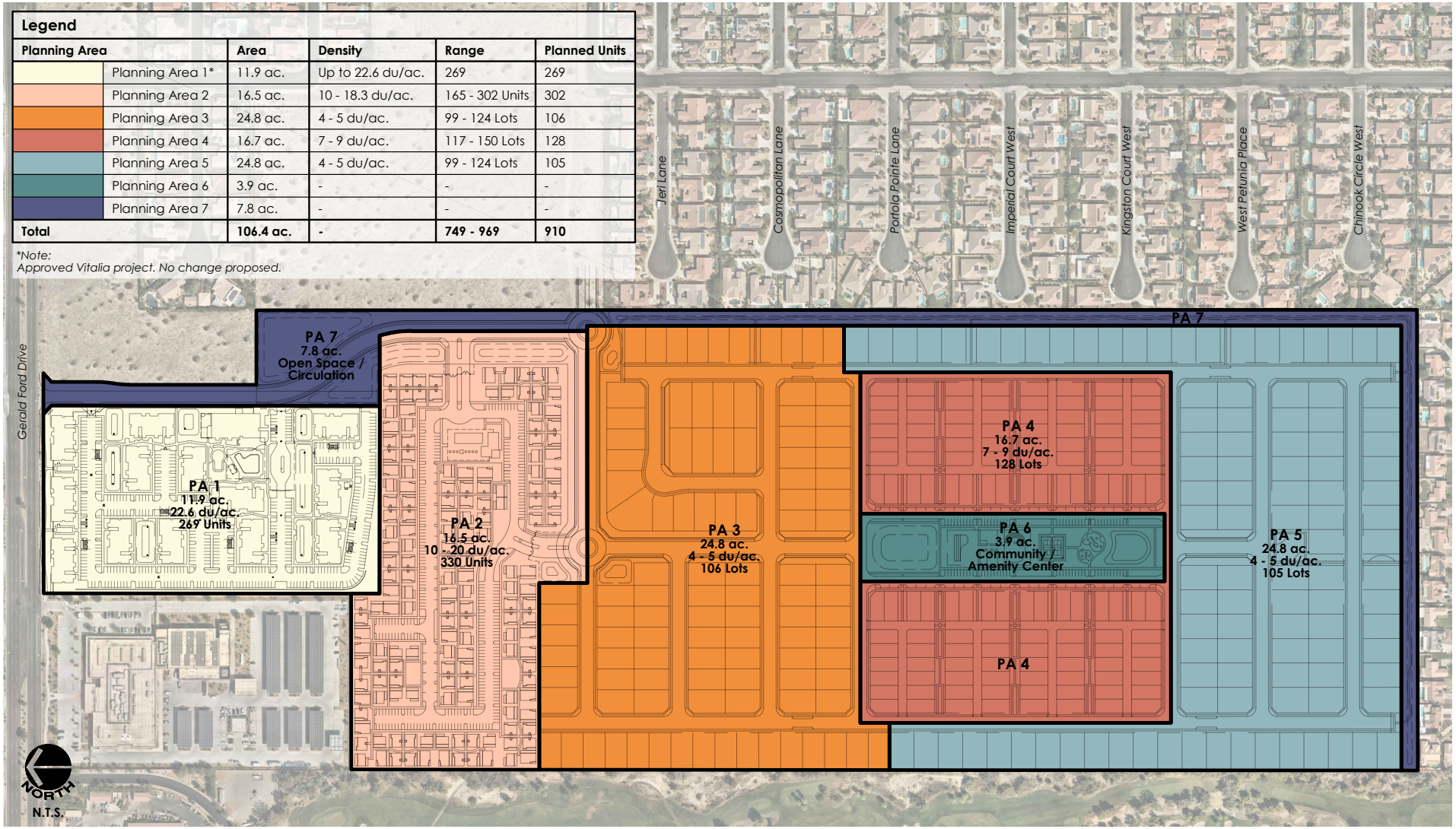
Installation of a traffic signal at the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection is warranted for Existing plus Ambient plus Project (2027) conditions.

Project access improvements for vehicles, bicyclists, and pedestrians are presented in Section 7 of this report. In addition, the Project applicant shall participate in CVAG's TUMF program by paying the requisite TUMF fee and other City fees as determined by the City.

1.2 PROJECT OVERVIEW

The Project is to consist of 969 residential dwelling units, of which 248 are single family detached, 302 are rental homes, 150 are paired housing, and 269 are apartments. It is anticipated that the Project will be fully developed by year 2027. A preliminary site plan of the proposed Project is shown in Exhibit 1-1.

EXHIBIT 1-1: PRELIMINARY SITE PLAN



In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, 2021) manual for land use codes 210, 215, and 220 are utilized. The Project is anticipated to generate a total of 7,267 trip-ends per day with 476 AM peak hour trips and 610 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2022) Conditions
- Existing plus Ambient Growth plus Project (EAP) (2027) Conditions
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2027) Conditions

All study area intersections are evaluated using the Highway Capacity Manual (HCM) 6th Edition analysis methodology.

1.3.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. For a detailed discussion on the existing traffic volumes, see Section 3.5 *Existing (2022) Traffic Counts*.

1.3.2 EAP (2027) CONDITIONS

The Existing plus Ambient Growth plus Project (EAP) conditions analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth factor from Existing conditions of 10.4% (2% per year, compounded annually over 5 years) is included for EAP (2027) traffic conditions. The ambient growth is consistent with the growth used by other projects in the area within the City of Palm Desert. Consistent with County of Riverside traffic study guidelines, the EAP analysis is intended to identify "Opening Year" deficiencies associated with the development of the proposed Project based on the expected background growth within the study area.

1.3.3 EAPC (2027) CONDITIONS

The Existing plus Project plus Ambient Growth plus Cumulative (EAPC) (2027) traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth factor from Existing conditions of 10.4% is included for EAPC (2027) traffic conditions. The ambient growth is consistent with the growth used by other projects in the area. This comprehensive list was compiled from information provided by the City of Palm Desert.

1.4 STUDY AREA

The Project study area was defined in coordination with the City of Palm Desert. Consistent with County of Riverside traffic study guidelines, the study area includes any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed project will add 50 or more peak hour trips. Exhibit 1-2 presents the study area and intersection analysis locations.

The "50 peak hour trip" criteria generally represents a minimum number of trips at which a typical intersection would have the potential to be substantively impacted by a given development proposal. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a widely utilized tool for estimating a potential area of impact (i.e., study area).

To ensure that this TA satisfies the needs of the City of Palm Desert, Urban Crossroads, Inc. prepared a Project specific traffic study scoping agreement for review by County staff prior to the preparation of this TA. The agreement provides an outline of the study area, trip generation, trip distribution, and analysis methodology. The agreement approved by the City of Palm Desert is included in Appendix 1.1.

The following study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for this TA based on consultation with City of Palm Desert.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	ID	Intersection Location
1	Monterey Avenue / Gerald Ford Drive	7	Cook Street / Gerald Ford Drive
2	Gateway Drive / Gerald Ford Drive	8	Portola Road / College Drive – Julie Drive
3	Rembrandt Parkway – Street "A"/ Gerald Ford Drive	9	Portola Road / Frank Sinatra Drive
4	Portola Road / Gerald Ford Drive	10	Portola Road / Country Club Drive
5	Pacific Avenue / Gerald Ford Drive	11	Monterey Avenue / Dinah Shore Drive
6	Technology Drive / Gerald Ford Drive		

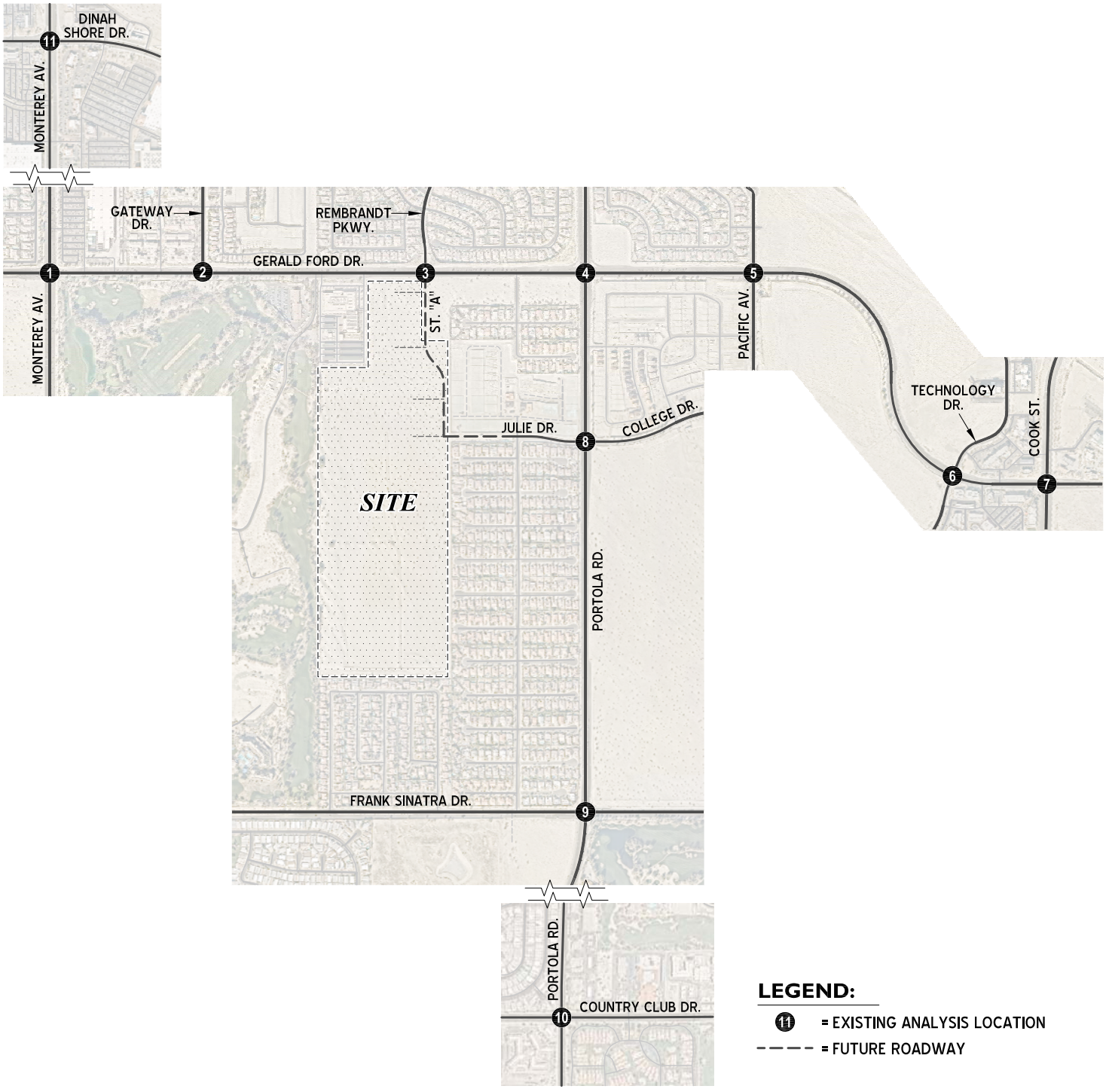
1.5 ANALYSIS FINDINGS

This section provides a summary of the analysis results for Existing (2022), EAP (2027), and EAPC (2027), conditions. Exhibit 1-3 presents the deficient intersections by scenario.

1.5.1 EXISTING (2022) CONDITIONS

For Existing (2022) traffic conditions, the study intersections were found to operate at an acceptable LOS (i.e., LOS "D" or better) during AM and PM peak hours.

EXHIBIT 1-2: TRAFFIC ANALYSIS STUDY AREA



1.5.2 EAP 2027 CONDITIONS

For EAP (2027) traffic conditions, the Street "A" - Rembrandt Parkway/Gerald Ford Drive intersection (#3) requires installation of a traffic signal in order to operate at acceptable conditions during AM and PM peak hours.

1.5.3 EAPC 2027 CONDITIONS

For EAPC (2027) traffic conditions, the study intersections were found to continue to operate at an acceptable LOS (i.e., LOS "D" or better) during AM and PM peak hours with installation of a traffic signal at the Street "A" - Rembrandt Parkway/Gerald Ford Drive intersection (#3).

1.6 CIRCULATION SYSTEM DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

Project installation of a traffic signal at the deficient intersection of Street "A" - Rembrandt Parkway/Gerald Ford Drive (#3), is anticipated to address intersection operational deficiencies for EAP (2027) and EAPC (2027) conditions.

Off-site and on-site roadway improvements needed to provide site access are enumerated in Section 7 *Site Access and Off-Site Roadway Improvements* section of this report.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled. (1)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near Capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (2)The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Palm Desert requires signalized intersection operations analysis based on the methodology described in the HCM. (2) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection Capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and Capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

A saturation flow rate of 1900 has been utilized for all study area intersections located within the study area. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak

15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (2)

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 6th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Palm Desert requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (2) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (3)

The signal warrant criteria for existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (3) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Urban warrants have been used as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below and rural warrants have been used on roadways with speeds greater than 40 miles per hour.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the Street "A" – Rembrandt Parkway at Gerald Ford Drive intersection and the Pacific Avenue at Gerald Ford Drive intersection.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Per the City of Palm Desert's General Plan, LOS D is the threshold for acceptable traffic conditions on the circulation network.

2.5 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. To determine whether the addition of project-related traffic at a study intersection would result in a deficiency, the following will be utilized:

- A deficiency occurs at study area intersections if the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and the addition of project trips causes the peak hour LOS of the study area intersection to operate at unacceptable LOS (i.e., LOS E or F). For intersections currently operating at unacceptable LOS (LOS E or F), a deficiency will occur if the Project contributes 50 or more peak hour trips to pre-project traffic conditions.

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Palm Desert General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Palm Desert staff (Appendix 1.1), the study area includes 11 existing and future intersections as shown previously on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF PALM DESERT GENERAL PLAN CIRCULATION ELEMENT

The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Palm Desert General Plan Circulation Element, are described below. Exhibit 3-2 shows the City of Palm Desert General Plan Circulation Element and Exhibit 3-3 illustrates the City of Palm Desert General Plan roadway cross-sections.

Gerald Ford Drive is a Balanced Arterial which currently provides five to six vehicle lanes (five west of Portola Avenue and six east of Portola Avenue) with either a median or two-way-left-turn-lane along with bicycle, golf cart, and pedestrian facilities, striving for a balance between transportation modes. Bike/golf cart lanes currently exist, as do some sidewalks.

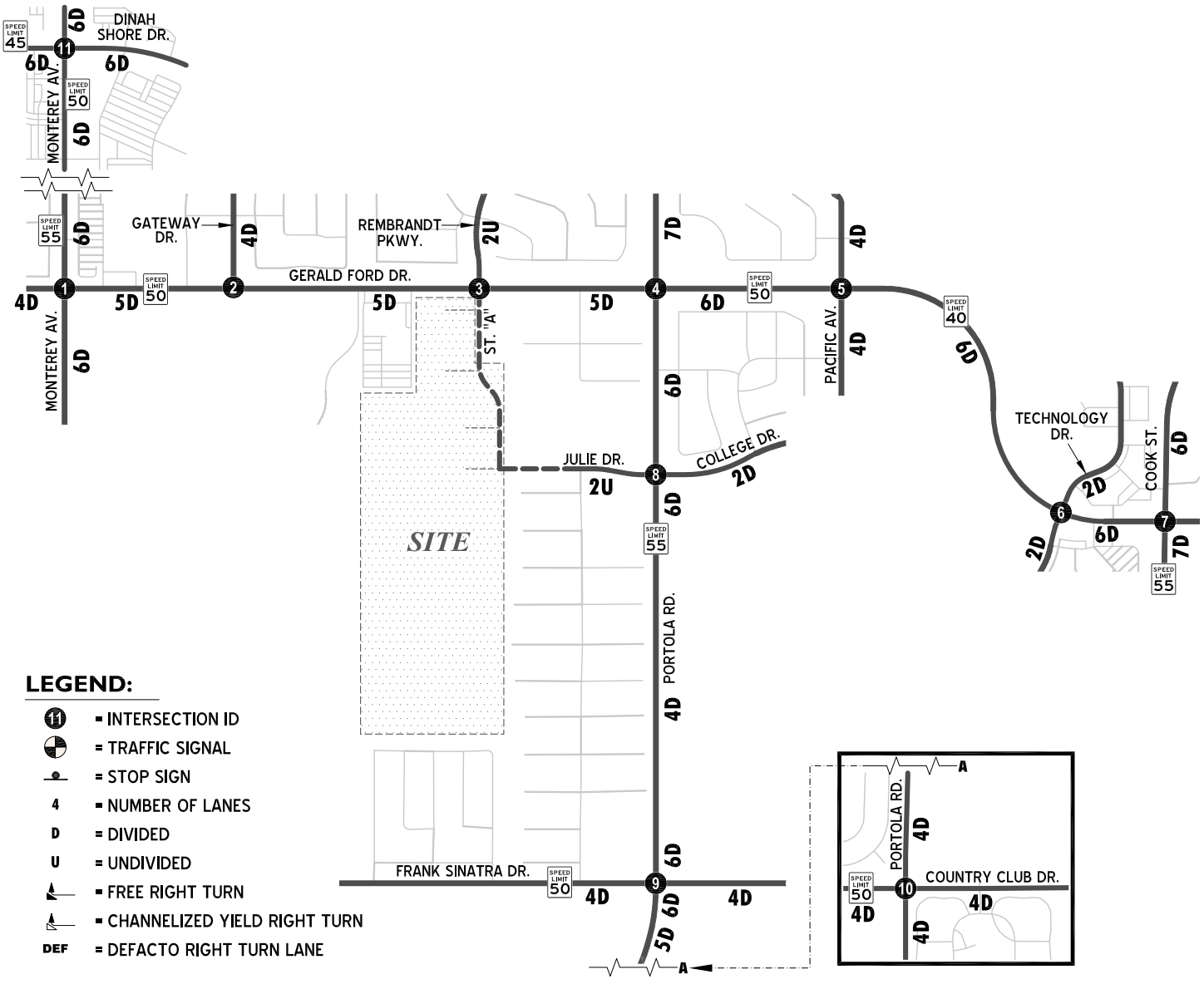
Monterey Avenue is a Vehicular Oriented Arterial which prioritizes the movement of automobiles. Six vehicle lanes are provided for Vehicular Oriented Arterials with median landscaping and turn lanes. Monterey Avenue currently exists in the study area with six travel lanes.

Portola Avenue is a Balanced Arterial which provides four vehicle lanes with either a median or two-way-left-turn-lane (TWLTL) along with bicycle, golf cart, and pedestrian facilities, striving for a balance between transportation modes. Portola Avenue currently exists in the study area with four to six travel lanes. Bike/golf cart lanes currently exist, as do some sidewalks.

Cook Street is a Vehicular Oriented Arterial which prioritizes the movement of automobiles. Six vehicle lanes are provided for Vehicular Oriented Arterials with median landscaping and turn lanes. Cook Street currently exists in the study area with six travel lanes.

Gateway Drive is a Secondary Street which provides a balance between vehicular circulation (four lanes), property access, and non-automobile modes. Gateway Drive currently exists as a four lane roadway with TWLTL, bike lanes, and sidewalks.

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



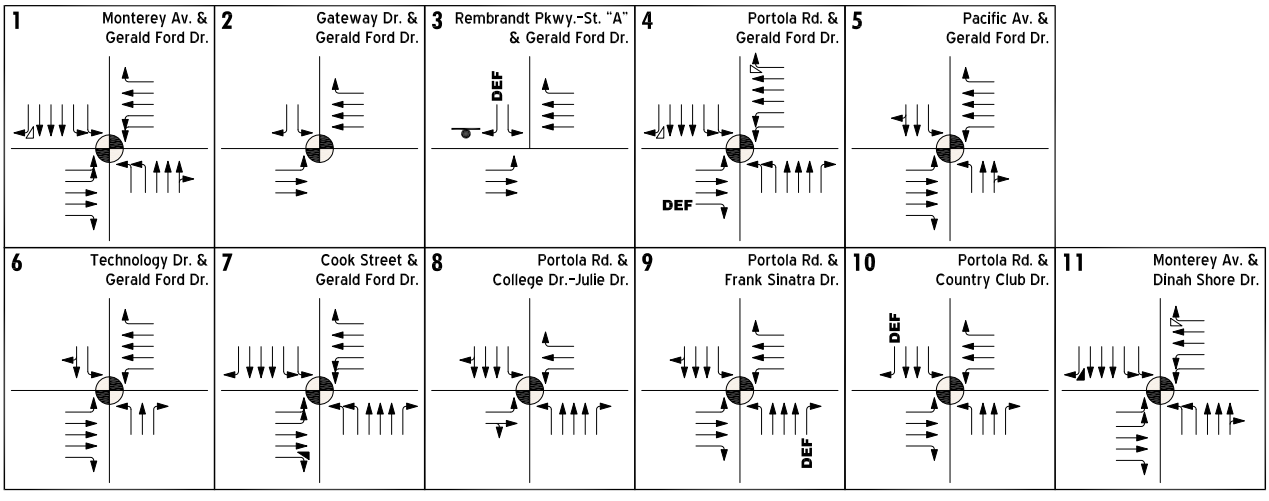


EXHIBIT 3-2: CITY OF PALM DESERT GENERAL PLAN CIRCULATION ELEMENT

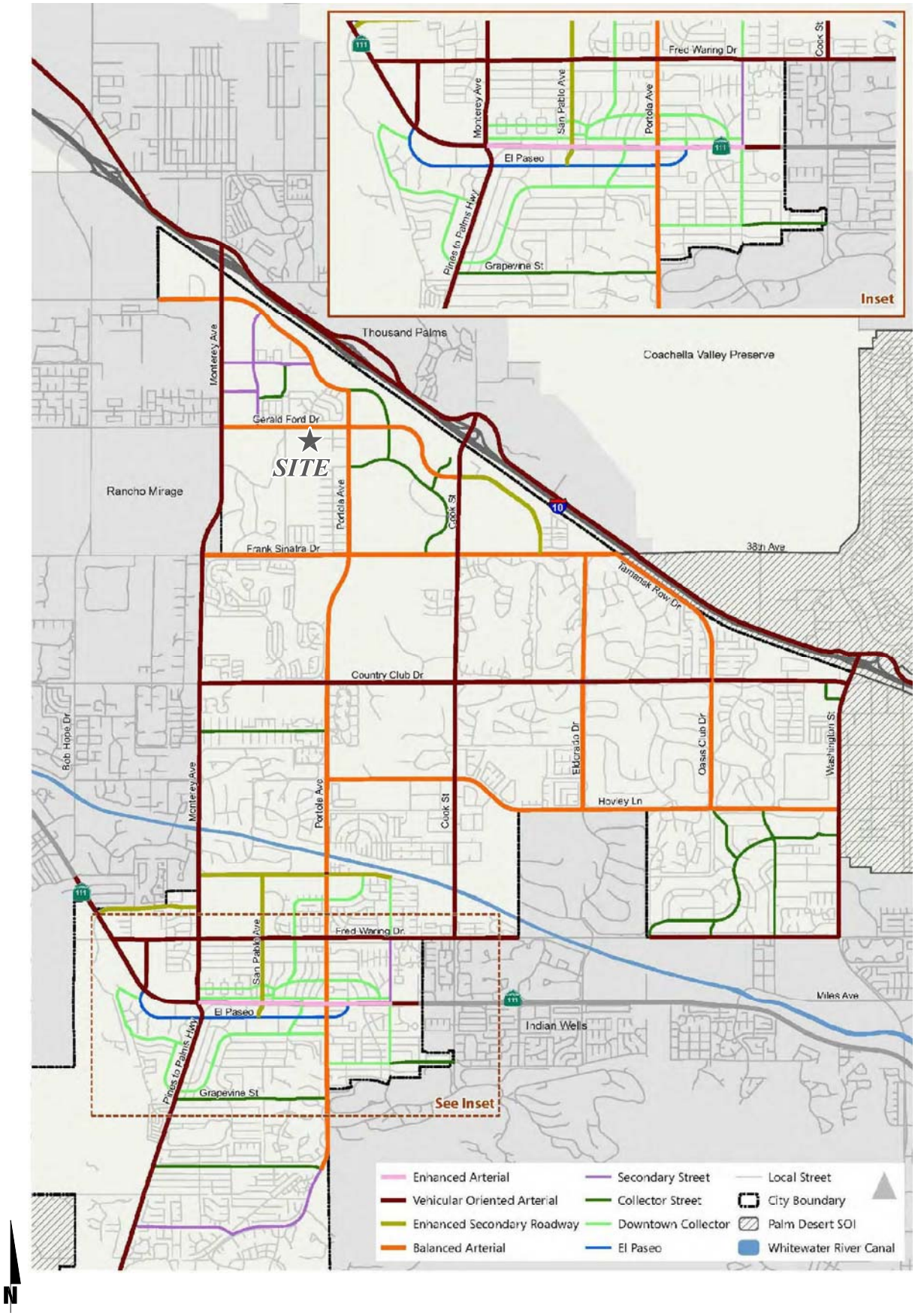
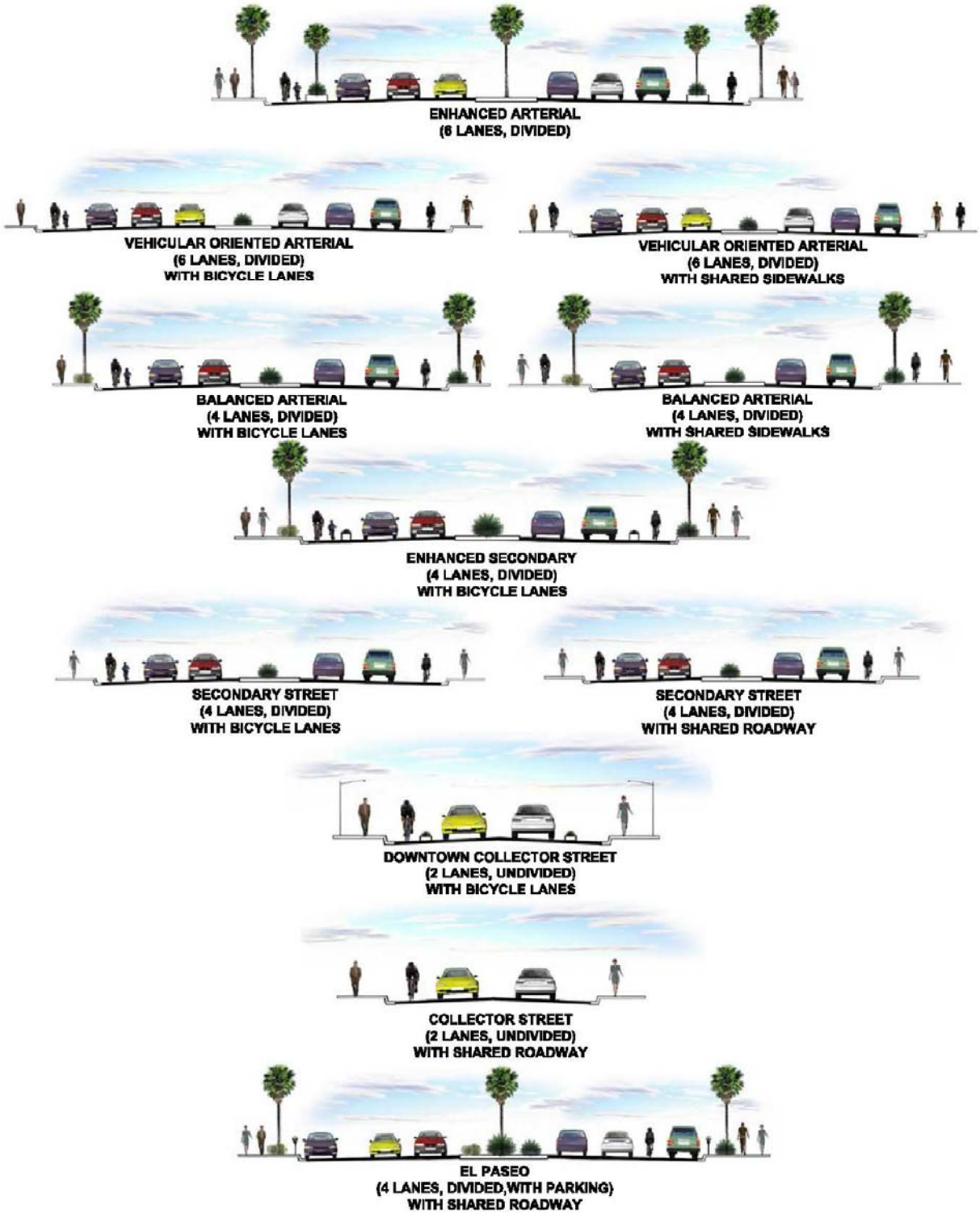


EXHIBIT 3-3: CITY OF PALM DESERT GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF PALM DESERT

Pacific Avenue is a Collector Street which provides two shared vehicle/bicycle lanes without median and is intended to funnel traffic to larger facilities. Pacific Avenue currently exists as a four lane roadway with TWLTL, bike lanes, and sidewalks.

Technology Drive is a Collector Street which provides two shared vehicle/bicycle lanes without median and is intended to funnel traffic to larger facilities. Technology Drive currently exists as a two lane roadway with TWLTL sidewalks.

College Drive / Julie Drive is a Collector Street which provides two shared vehicle/bicycle lanes without median and is intended to funnel traffic to larger facilities. Julie Lane exists as a two lane undivided road from Shepherd Lane to Portola Avenue. East of Portola Avenue, College Drive exists as a two lane road with bike/golf cart lanes and sidewalks.

Frank Sinatra Drive is a Balanced Arterial which provides four vehicle lanes with either a median or two-way-left-turn-lane along with bicycle and pedestrian facilities, striving for a balance between transportation modes. Frank Sinatra Drive currently exists in the study area with four travel lanes, bike lanes and some sidewalks.

Country Club Drive is a Vehicular Oriented Arterial which prioritizes the movement of automobiles. Six vehicle lanes are provided for Vehicular Oriented Arterials with median landscaping and turn lanes. Country Club Drive currently exists in the study area with four travel lanes, bike lanes, and sidewalks.

Dinah Shore Drive is a Balanced Arterial which provides four vehicle lanes with either a median or two-way-left-turn-lane along with bicycle and pedestrian facilities, striving for a balance between transportation modes. Dinah Shore Drive currently exists in the study area with six travel lanes west of Monterey Avenue and four travel lanes east of Monterey Avenue. Sidewalks exist as do bike lanes east of Monterey Avenue.

3.3 TRANSIT SERVICE

The study area is not currently served by the Sunline transit routes. The nearest bus services are located along Monterey Avenue via Route 32 and Cook Street via Route 20, Route 21. Transit service is reviewed and updated by Sunline periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

Transit service is reviewed and updated by STA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the Project Applicant work in conjunction with STA to potentially accommodate bus service to the site.

3.4 PEDESTRIAN AND BICYCLE FACILITIES

Existing on-street bike lanes are located on both sides of the roadways along Portola Road, Gerald Road, and Gateway Drive. Between the Project's westerly boundary and Portola Road, there are no existing sidewalks on the south side of Gerald Ford Drive.

3.5 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in March and April 2022. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

The weekday AM and PM peak hour count data are representative of typical peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity that would prevent or limit roadway access and detour routes. These raw turning volumes have been flow conserved between intersections with limited access, no access and where there are currently no uses generating traffic.

Existing weekday ADT volumes are shown on Exhibit 3-4. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

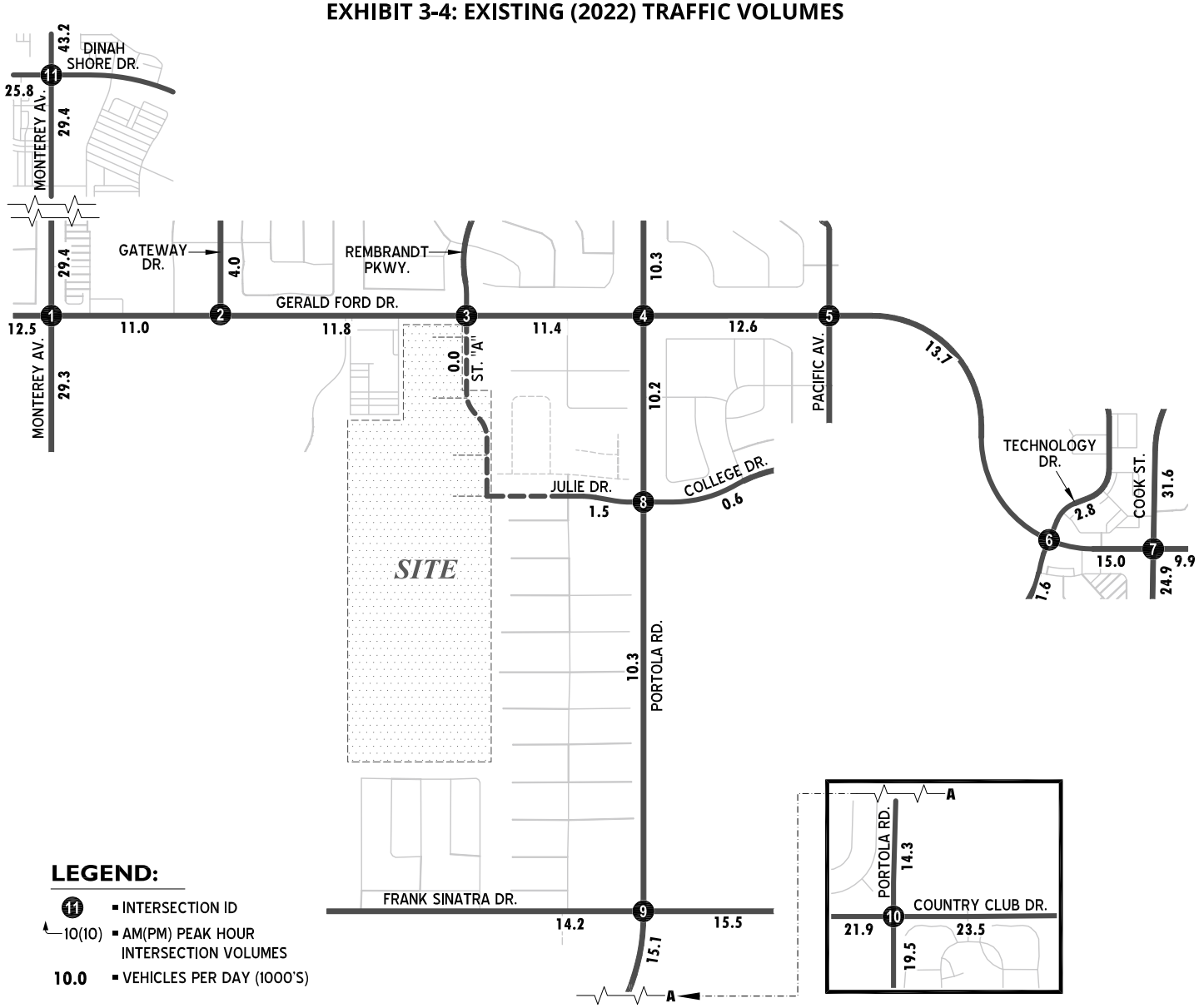
Weekday PM Peak Hour (Approach Volume + Exit Volume) x 12.987 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.7 percent. As such, the above equation utilizing a factor of 12.987 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.7 percent (i.e., 1/0.077 = 12.987) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday peak hour intersection volumes are also shown on Exhibit 3-4.

3.6 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 3-1, which indicates that all existing study area intersections are currently operating at acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

EXHIBIT 3-4: EXISTING (2022) TRAFFIC VOLUMES



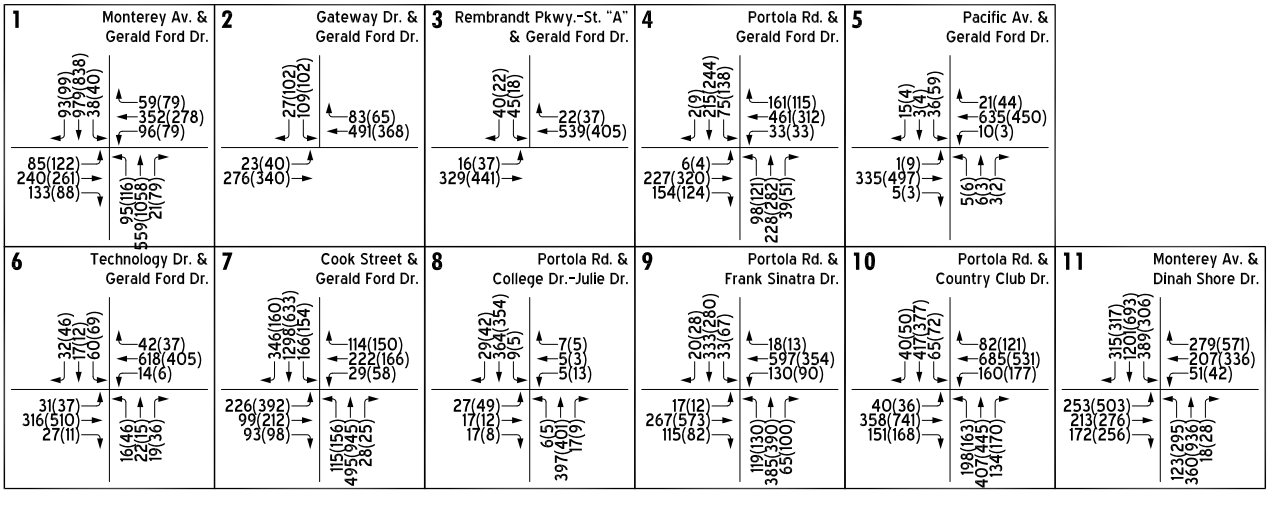


TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Monterey Av. / Gerald Ford Dr.	TS	2	3	0	2	3	1	2	2	1	2	2	1	29.6	26.3	C	C
2	Gateway Dr. / Gerald Ford Dr.	TS	0	0	0	1	0	1	1	2	0	0	3	1	11.5	12.0	B	B
3	Rembrandt Pkwy. / Gerald Ford Dr.	CSS	0	0	0	1	0	d	1	2	0	0	3	1	18.2	15.7	C	C
4	Portola Rd. / Gerald Ford Dr.	TS	2	3	1	2	3	1	1	2	d	2	3	1	36.5	36.0	D	D
5	Pacific Av. / Gerald Ford Dr.	TS	1	2	0	1	2	0	1	3	1	1	3	1	12.8	10.7	B	B
6	Technology Dr. / Gerald Ford Dr.	TS	1	1	1	1	1	0	1	3	1	1	3	1	18.1	20.1	B	C
7	Cook St. / Gerald Ford Dr.	TS	2	3	1	2	3	1	2	2	1>>	2	2	1	27.7	31.3	C	C
8	Portola Rd. / Julie Dr. - College Dr.	TS	1	3	1	1	3	0	1	1	0	1	1	1	8.5	9.3	A	A
9	Portola Rd. / Frank Sinatra Dr.	TS	1	3	d	1	3	0	1	2	1	1	2	1	24.7	22.4	C	C
10	Portola Rd. / Country Club Dr.	TS	1	2	1	1	2	d	1	2	1	1	2	1	40.7	38.2	D	D
11	Monterey Av. / Dinah Shore Dr.	TS	2	3	0	2	3	1>>	2	2	1	2	2	1	33.2	39.1	C	D

[1] TS = Traffic Signal; CSS = Cross-street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; >> = Free-Right Turn Lane

[3] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The study area unsignalized intersections do not currently warrant a traffic signal for Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

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4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network.

The Project is proposed to consist of 969 residential dwelling units, of which 248 are single family detached, 302 are rental homes, 150 are paired housing, and 269 are apartments.

It is anticipated that the Project would be fully developed by year 2027. Project will have full access to Gerald Ford Drive via Street "A" and to Portola Road via the westerly extension of Julie Drive. Regional access to the project site is provided via the I-10 Freeway at Monterey Avenue and Cook Street along Gerald Ford Drive.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the ITE Trip Generation Manual (11th Edition, 2021) for land use codes 210, 215, and 220 are used. (4) Table 4-1 presents the trip generation rates and the resulting trip generation summary for the proposed Project. As shown in Table 4-1, the Project is anticipated to generate a total of 7,267 trip-ends per day with 476 AM peak hour trips and 610 PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution has been developed based on past work experience in the vicinity of the Project site and refined to reflect the roadway network and the surrounding uses in the vicinity of the proposed Project as they exist today. The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibit 4-1 depicts the trip distribution patterns for the Project.

4.3 MODAL SPLIT

The potential for Project trips (non-truck) to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Single Family Detached	210	248	DU	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Multifamily Housing (Low-Rise)	220	302	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Single Family Attached	215	150	DU	0.15	0.33	0.48	0.32	0.25	0.57	7.20
Multifamily Housing (Low-Rise)	220	269	DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74

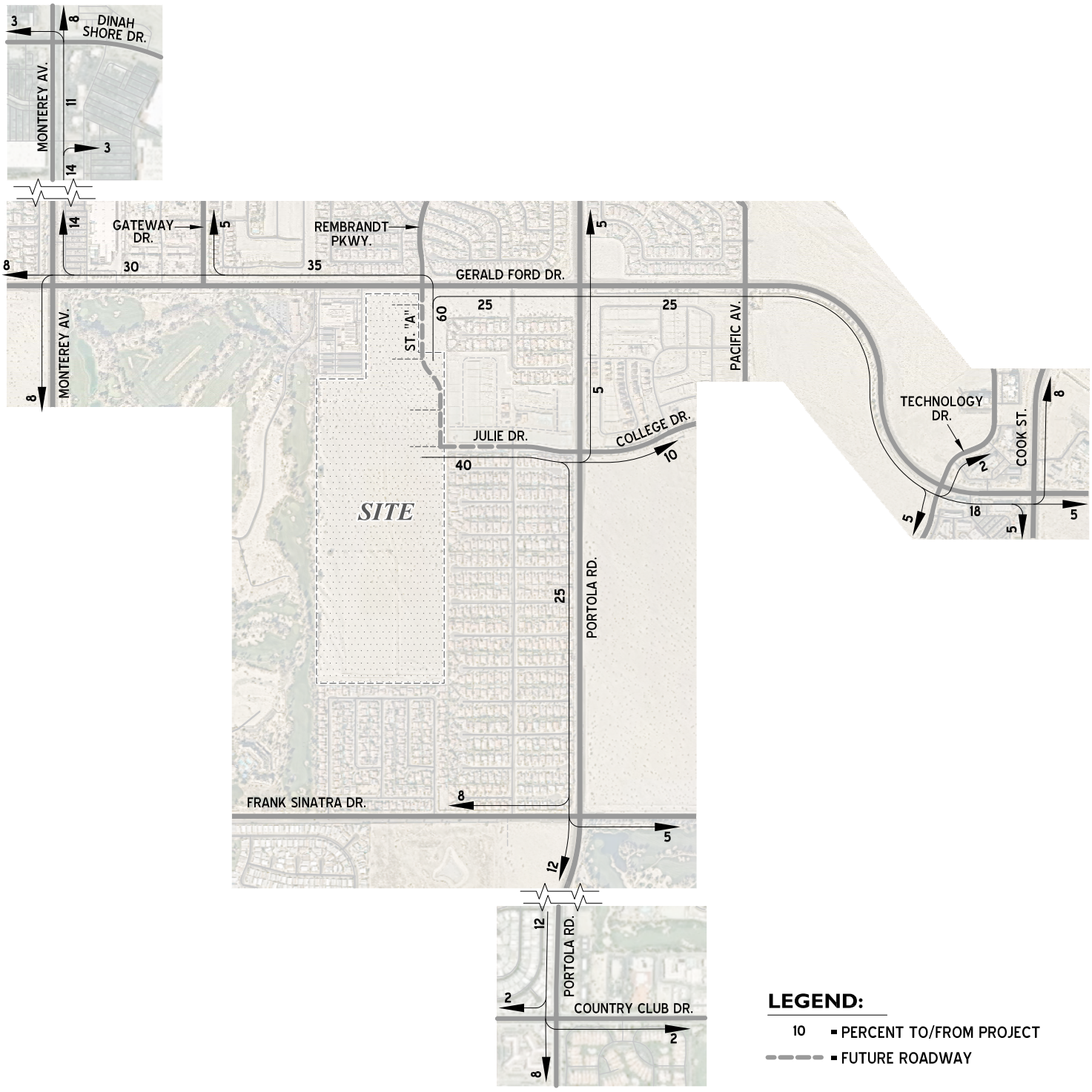
Trip Generation Results

Land Use	ITE LU Code	Quantity[2]		AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Single Family Detached	210	248	DU	45	129	174	146	87	233	2,339
Multifamily Housing (Low-Rise)	220	302	DU	30	91	121	97	57	154	2,035
Single Family Attached	215	150	DU	23	50	73	48	38	86	1,080
Multifamily Housing (Low-Rise)	220	269	DU	27	81	108	86	51	137	1,813
TOTAL				125	351	476	377	233	610	7,267

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).
[2] DU = Dwelling Unit

F:\UXRjobs_14600-15000\14702\Excel\[14702 - Report.xlsx]14702-Trip Gen

EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION



4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project weekday ADT and weekday peak hour intersection turning movement volumes are shown on Exhibit 4-2.

4.5 BACKGROUND TRAFFIC

Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in conjunction with traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Opening Year Cumulative (2027) traffic volumes are provided in Section 4.6 of this report. The traffic generated by the proposed Project was then manually added to the base volume to determine EAP/EAPC forecasts.

4.5.1 AMBIENT GROWTH RATE

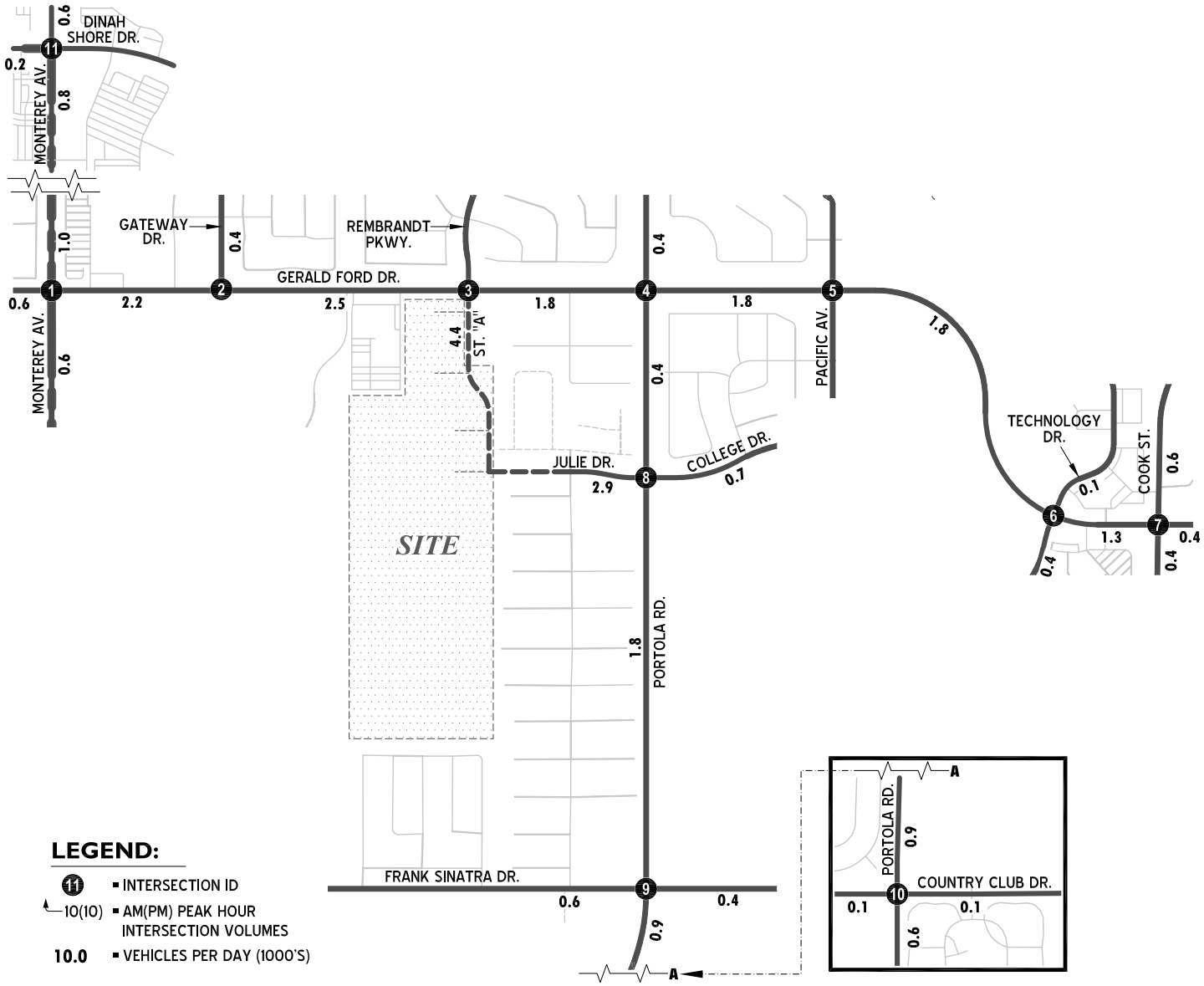
Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2027 traffic conditions. The total ambient growth is 10.4% for 2027 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies, for EAPC traffic conditions.

4.5.2 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Palm Desert.

Exhibit 4-3 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-2. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year Cumulative forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-2 are reflected as part of the background traffic. Cumulative project traffic volumes are shown on Exhibit 4-4.

EXHIBIT 4-2: PROJECT ONLY TRAFFIC VOLUMES



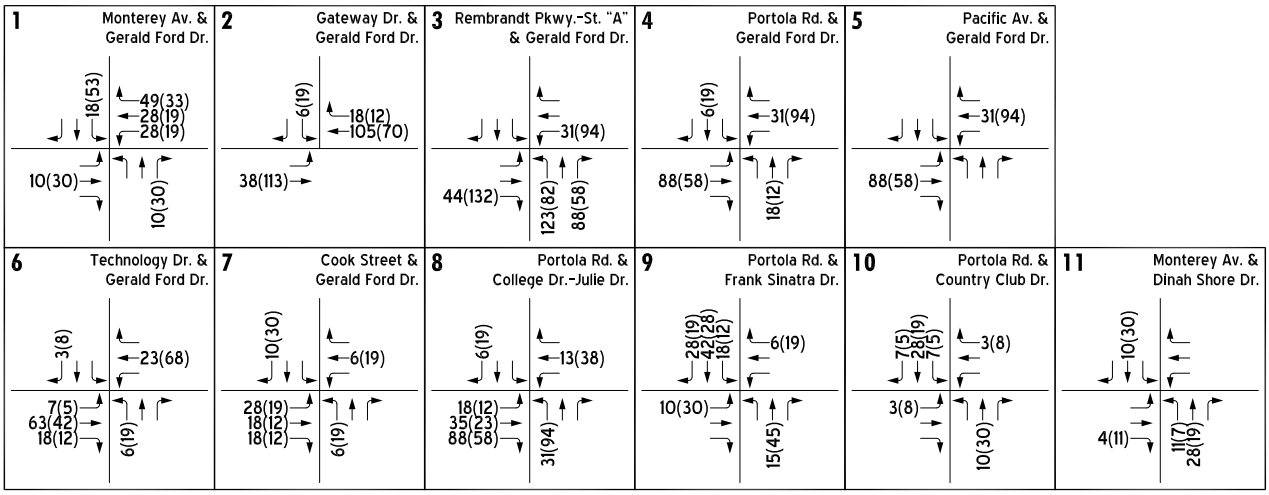


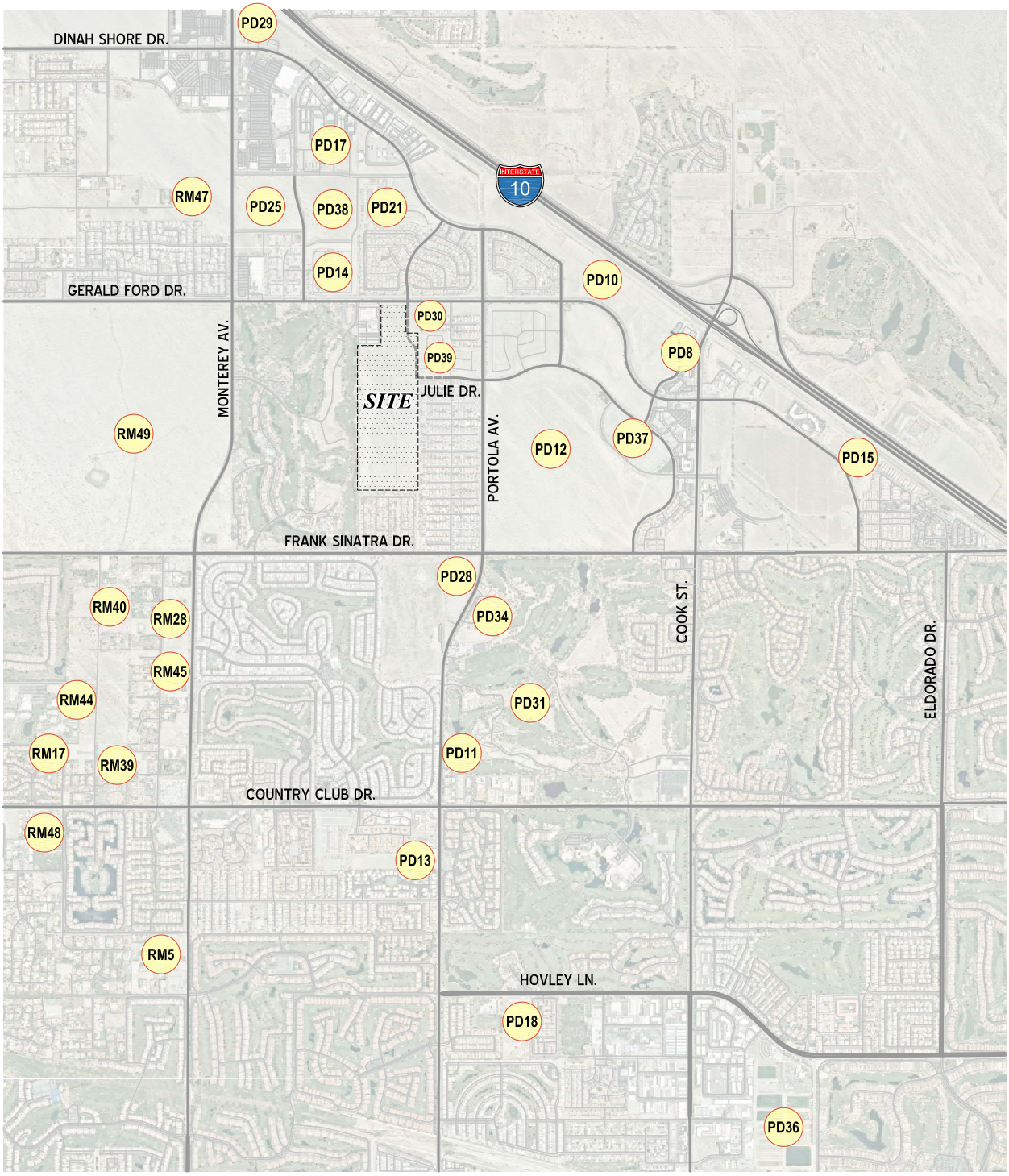
TABLE 4-2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
		City of Palm Desert		
PD8	Fairfield Inn & Suites Marriott Hotel	Hotel	108	RM
PD10	Millennium Palm Desert	SFDR	166	DU
		Multi-Family	612	DU
		Commercial	551.0	TSF
		Hotel	250	RM
PD11	Scotelle Office Building	Commercial	10.732	TSF
PD12	University Park	SFDR	773	DU
		Multi-Family	336	DU
PD13	Villa Portofino	Congregate Care	161	DU
		Assisted Living	150	DU
		SFDR	288	DU
		Multi-Family	182	DU
PD14	Dolce	SFDR	159	DU
PD15	Spanish Walk	Multi-Family (affordable housing)	150	DU
PD17	Falling Waters	SFDR	159	DU
PD18	The Sands Apartments	Apartments (with 20% affordable housing)	388	DU
PD21	Ponderosa II	SFDR	111	DU
		Multi-Family	114	DU
PD25	Monterey Specific Plan	Multi-Family	384	DU
		Commercial	120.0	TSF
PD28	Portola Av./Frank Sinatra Dr. Residential	Multi-Family	402	DU
PD29	Monterey Crossings	Commercial	120.0	TSF
PD30	Santa Barbara Apartment	Multi-Family	48	DU
PD31	Desert Surf	Resort Hotel	350	RM
		Surf Lagoon	1350	Guests
		Shopping Center	4.0	TSF
		High-Turnover (Sit-Down) Restaurant	11.250	TSF
PD34	The Retreat at Desert Willow	Condominiums	112	DU
PD36	Laboratory/Office Space Building	Laboratory/Office Space	20.5	TSF
PD37	Lennar	Single Family - Attached Residential	196	DU
PD38	Urban Crossings (UHC)	Multi-Family	176	DU
PD39	TTM 37993	SFDR	176	DU
		City of Rancho Mirage		
RM5	PDP 13003/FDP 13004	SFDR	32	DU
RM17	TTM 36623/PDP 14003	SFDR	17	DU
RM28	TTM 32308 (Los Ranchos)	SFDR	7	DU
RM39	TPM 34233	SFDR	4	DU
RM40	TPM 34741	SFDR	4	DU
RM44	TPM 36683	SFDR	1	DU
RM45	TPM 36849	SFDR	3	DU
RM47	Monterey Medical Center	Medical Office	75.164	TSF
RM48	Pulte Homes / Del Webb	Assisted Living	84	Beds
RM49	Section 31 Specific Plan	Hotel	400	RM
		Retail	175.0	TSF
		Multi-Family (Mid Rise)	832	DU
		Single Family	1100	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; RM = Room

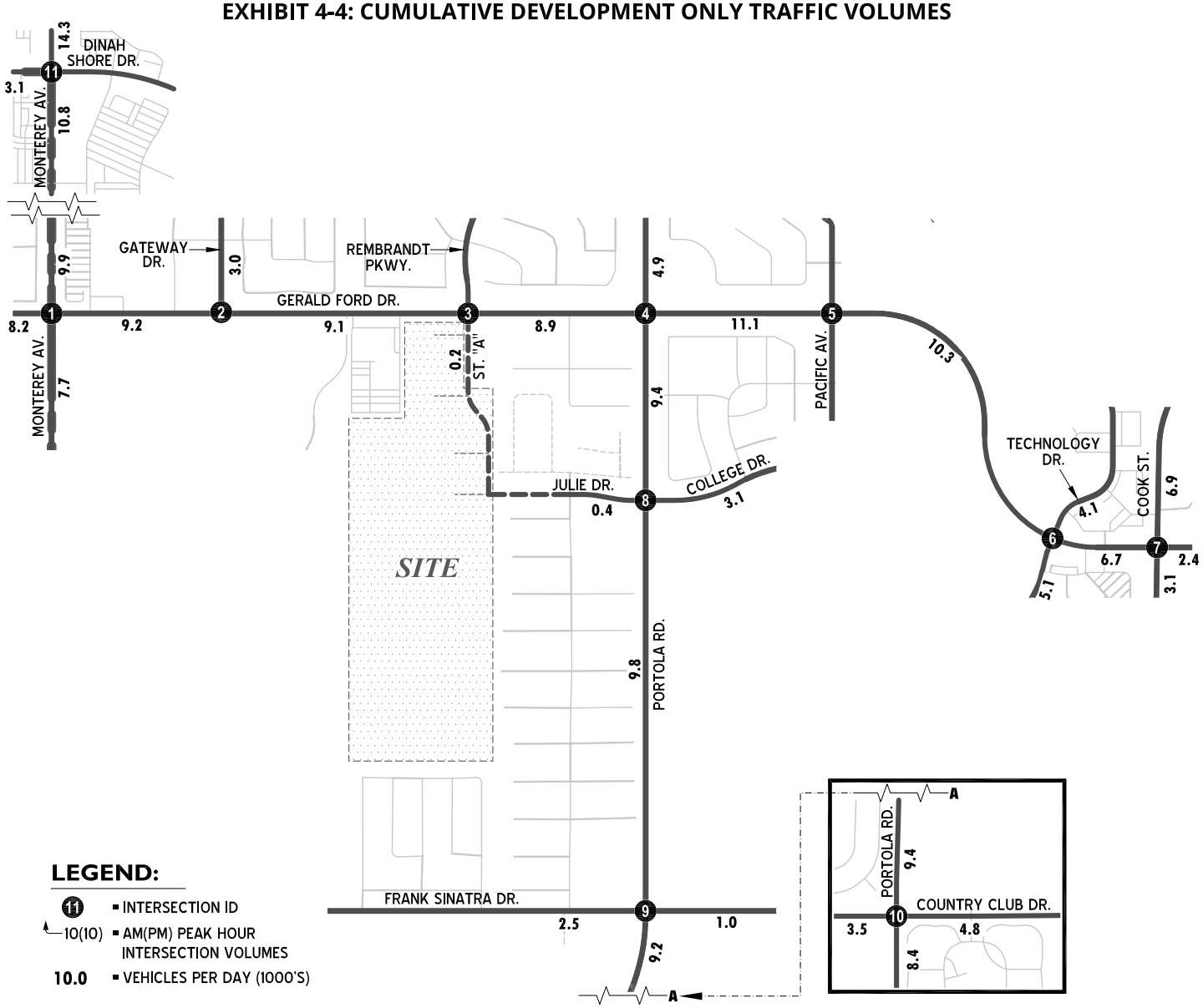
EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

= CUMULATIVE DEVELOPMENT ID

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT ONLY TRAFFIC VOLUMES



1 Monterey Av. & Gerald Ford Dr.	2 Gateway Dr. & Gerald Ford Dr.	3 Rembrandt Pkwy.-St. "A" & Gerald Ford Dr.	4 Portola Rd. & Gerald Ford Dr.	5 Pacific Av. & Gerald Ford Dr.
64(149) 105(242) 28(80) → 52(63) 147(222) 60(114) ←	59(61) 71(53) → 31(80) 200(337) ←	→ 219(410) ←	0(1) 101(198) 4(16) → 6(15) 146(352) 60(147) ←	119(293) 70(149) 132(280) → 119(290) 67(174) 8(25) ←
99(126) 122(239) →	34(78) 184(350) →	250(390) 4(13) →	6(4) 216(306) 41(84) →	106(304) 132(130) 35(41) →
155(211) 68(109) ←		12(8) ←	72(64) 124(185) 53(152) ←	25(47) 62(155) 22(15) ←

6 Technology Dr. & Gerald Ford Dr.	7 Cook Street & Gerald Ford Dr.	8 Portola Rd. & College Dr.-Julie Dr.	9 Portola Rd. & Frank Sinatra Dr.	10 Portola Rd. & Country Club Dr.	11 Monterey Av. & Dinah Shore Dr.
63(148) 8(19) 14(20) → 18(21) 75(207) 34(99) ←	73(198) 67(87) 5(14) → 14(9) 41(104) ←	1(2) 170(334) 30(93) → 52(35) 4(13) 68(73) ←	36(51) 210(361) → 13(10) 11(33) ←	35(53) 153(240) 67(96) → 48(108) 20(37) 27(68) ←	177(406) 113(263) → 117(254) 62(125) 41(102) ←
88(131) 123(173) 75(120) →	140(153) 69(85) 21(19) →	2(1) 12(8) 8(6) →	51(80) 36(33) 11(33) →	24(60) 35(33) 22(60) →	63(127) 3(9) →
56(134) 17(13) 92(63) ←	13(25) 62(80) ←	3(9) 173(373) 23(66) ←	0(1) 178(387) 0(1) ←	53(40) 121(264) 60(49) ←	8(5) 292(329) 48(102) ←

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5 EAP (2027) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Ambient Growth plus Project (EAP) conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

Project driveways and those facilities assumed to be constructed by the Project to provide site access are assumed to be in place for EAP (2027) conditions (e.g., intersection and roadway improvements associated with Street "A" [Rembrandt Parkway southerly extension] and the westerly extension of Julia Street).

5.2 EAP TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 10.4% and the addition of Project traffic. The weekday ADT and weekday peak hour intersection turning movement volumes which can be expected for EAP (2027) traffic conditions are shown on Exhibit 5-1.

5.3 EAP INTERSECTION OPERATIONS ANALYSIS

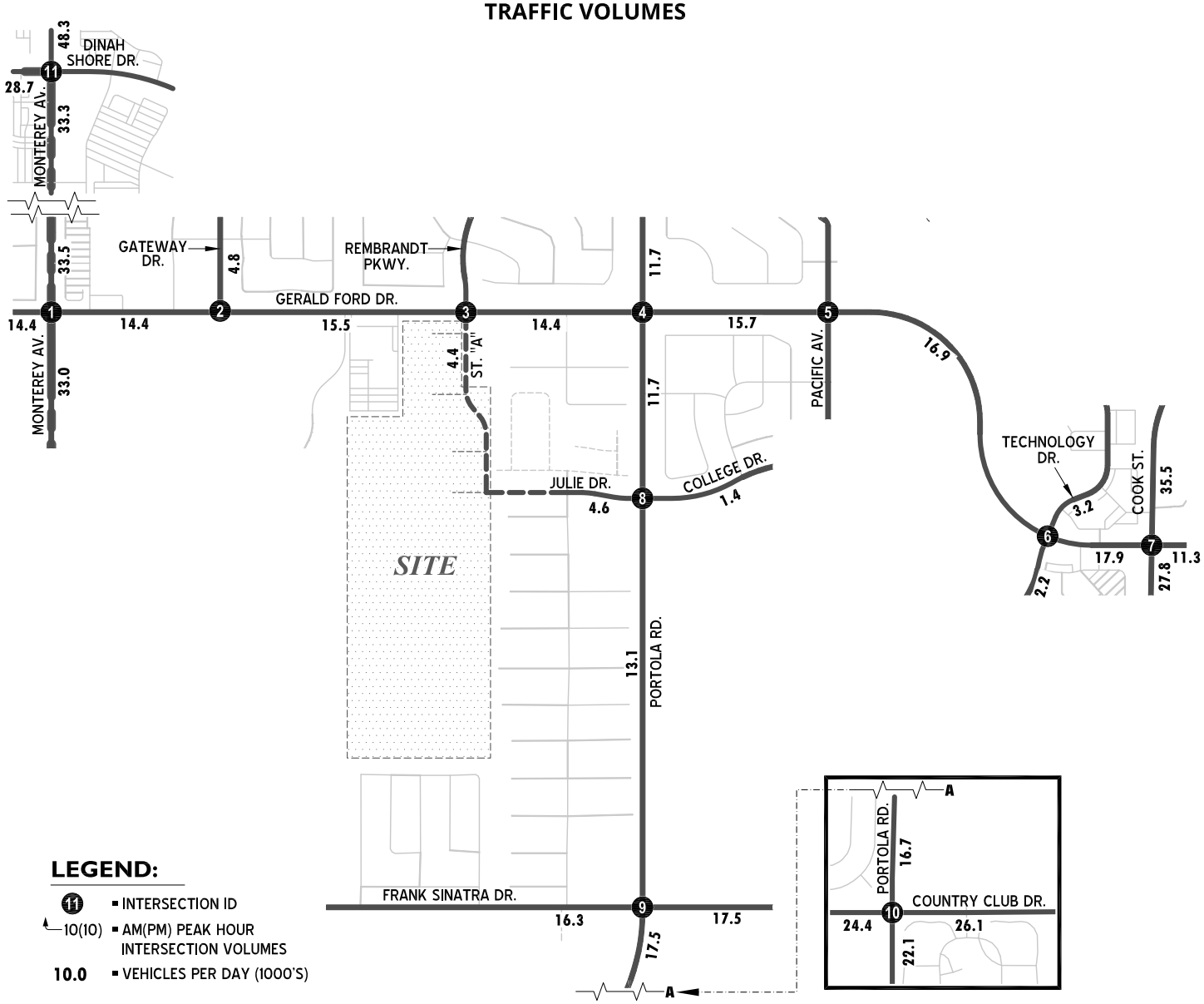
EAP (2027) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized on Table 5-1 for EAP (2027) traffic conditions, which indicate that the study area intersections are anticipated to continue to operate at an acceptable LOS (LOS "D" or better) under EAP (2027) traffic conditions. The intersection operations analysis worksheets for EAP (2027) traffic conditions are included in Appendix 5.1 of this TA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAP (2027) traffic conditions provided in Appendix 3.3. The unsignalized intersections are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants with the addition of Project traffic (see Appendix 3.3).

As mentioned previously, a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

EXHIBIT 5-1: EXISTING PLUS AMBIENT PLUS PROJECT (2027) TRAFFIC VOLUMES



1 Monterey Av. & Gerald Ford Dr.	2 Gateway Dr. & Gerald Ford Dr.	3 Rembrandt Pkwy.-St. "A" & Gerald Ford Dr.	4 Portola Rd. & Gerald Ford Dr.	5 Pacific Av. & Gerald Ford Dr.
103(109) 108(925) 60(97) → 114(120) ← 417(326) ← 134(106)	30(113) 126(132) → 110(84) ← 647(476)	44(24) 1(2) 50(20) → 24(41) ← 595(447) ← 33(98)	2(10) 243(288) 83(152) → 178(127) ← 540(438) ← 37(37)	17(4) 3(4) 40(65) → 23(49) ← 732(591) ← 11(3)
94(135) 275(318) 147(97) → 105(128) 617(168) 33(117) ↑	25(44) 343(488) →	18(41) 363(487) 46(136) → 127(84) 21(1) 92(60) ↑	7(4) 339(412) 170(137) → 110(138) 270(323) 43(56) ↑	1(10) 458(607) 6(3) → 6(7) 7(3) 3(2) ↑

6 Technology Dr. & Gerald Ford Dr.	7 Cook Street & Gerald Ford Dr.	8 Portola Rd. & College Dr.-Julie Dr.	9 Portola Rd. & Frank Sinatra Dr.	10 Portola Rd. & Country Club Dr.	11 Monterey Av. & Dinah Shore Dr.
38(59) 19(13) 66(76) → 46(41) ← 705(515) ← 15(7)	392(207) 1433(699) 183(170) → 126(166) ← 251(202) ← 32(64)	38(65) 402(391) 10(6) → 8(6) ← 19(41) ← 6(14)	50(50) 411(337) 54(86) → 26(33) ← 659(391) ← 144(99)	51(60) 488(435) 79(84) → 94(142) ← 756(586) ← 177(195)	348(350) 1336(795) 429(338) → 308(630) ← 229(371) ← 56(46)
41(46) 412(605) 48(24) → 24(70) 24(17) 21(40) ↑	278(452) 127(246) 121(120) → 133(191) 547(1043) 31(28) ↑	48(66) 54(36) 107(67) → 38(100) 438(443) 19(10) ↑	29(43) 295(633) 127(91) → 131(144) 449(417) 72(110) ↑	47(48) 395(818) 167(185) → 219(180) 459(521) 148(188) ↑	279(555) 235(305) 194(294) → 147(333) 425(1052) 20(31) ↑

TABLE 5-1: INTERSECTION ANALYSIS FOR EAP (2027) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Monterey Av. / Gerald Ford Dr.	TS	2	3	0	2	3	1	2	2	1	2	2	1	31.8	28.9	C	C
2	Gateway Dr. / Gerald Ford Dr.	TS	0	0	0	1	0	1	1	2	0	0	3	1	11.8	12.1	B	B
3	Rembrandt Pkwy. / Gerald Ford Dr.	CSS	0	0	0	1	0	d	1	2	0	0	3	1	37.8	>50	E	F
	- With Improvements	**TS**	**0.5**	**0.5**	1	0.5	0.5	d	1	2	**1**	**1**	3	1	30.7	21.8	C	C
4	Portola Rd. / Gerald Ford Dr.	TS	2	3	1	2	3	1	1	2	d	2	3	1	36.6	36.4	D	D
5	Pacific Av. / Gerald Ford Dr.	TS	1	2	0	1	2	0	1	3	1	1	3	1	13.4	11.0	B	B
6	Technology Dr. / Gerald Ford Dr.	TS	1	1	1	1	1	0	1	3	1	1	3	1	19.1	21.1	B	C
7	Cook St. / Gerald Ford Dr.	TS	2	3	1	2	3	1	2	2	1>>	2	2	1	30.6	33.3	C	C
8	Portola Rd. / Julie Dr. - College Dr.	TS	1	3	1	1	3	0	1	1	0	1	1	1	17.8	18.8	B	B
9	Portola Rd. / Frank Sinatra Dr.	TS	1	3	d	1	3	0	1	2	1	1	2	1	29.5	24.0	C	C
10	Portola Rd. / Country Club Dr.	TS	1	2	1	1	2	d	1	2	1	1	2	1	42.2	39.9	D	D
11	Monterey Av. / Dinah Shore Dr.	TS	2	3	0	2	3	1>>	2	2	1	2	2	1	34.3	41.0	C	D

[1] TS = Traffic Signal; CSS = Cross-street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; >> = Free-Right Turn Lane; **1** = Improvement

[3] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

5.5 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

The study area intersections are anticipated to operate at an acceptable LOS with the addition of Project traffic, with the exception of the Street "A" - Rembrandt Parkway / Gerald Ford Drive intersection. Cross-street stop control at this location did not provide acceptable traffic operations with implementation of the Project. Installation of a traffic signal, in addition to Street "A" (Rembrandt Parkway southerly extension), is anticipated to serve the Project and provide acceptable intersection operations with improvement enumerated in Section 7 of this report.

The improvements described in Section 7 of this report would achieve acceptable LOS standards for EAP (2027) traffic conditions as shown in Table 6-1. Recommended improvements at the Street "A" – Rembrandt Parkway / Gerald Ford Drive include the following:

- Install traffic signal
- NB Approach: Shared left/thru lane and separate right turn
- WB Approach: 1 WB left turn lane
- EB Approach: 1 EB right turn lane

The intersection operations analysis worksheets for EAP (2027) traffic conditions, with improvements, are included in Appendix 5.1 of this TA.

6 EAPC (2027) TRAFFIC CONDITIONS

This section discusses the methods used to develop Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2027) traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

Project driveways and those facilities assumed to be constructed by the Project to provide site access are assumed to be in place for EAPC (2027) conditions (e.g., intersection and roadway improvements associated with Street "A" [Rembrandt Parkway southerly extension] and the westerly extension of Julia Street). If applicable, driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for EAPC (2027) conditions.

6.2 EAPC (2027) TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 10.4% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday peak hour volumes which can be expected for EAPC (2027) traffic conditions are shown on Exhibit 6-1.

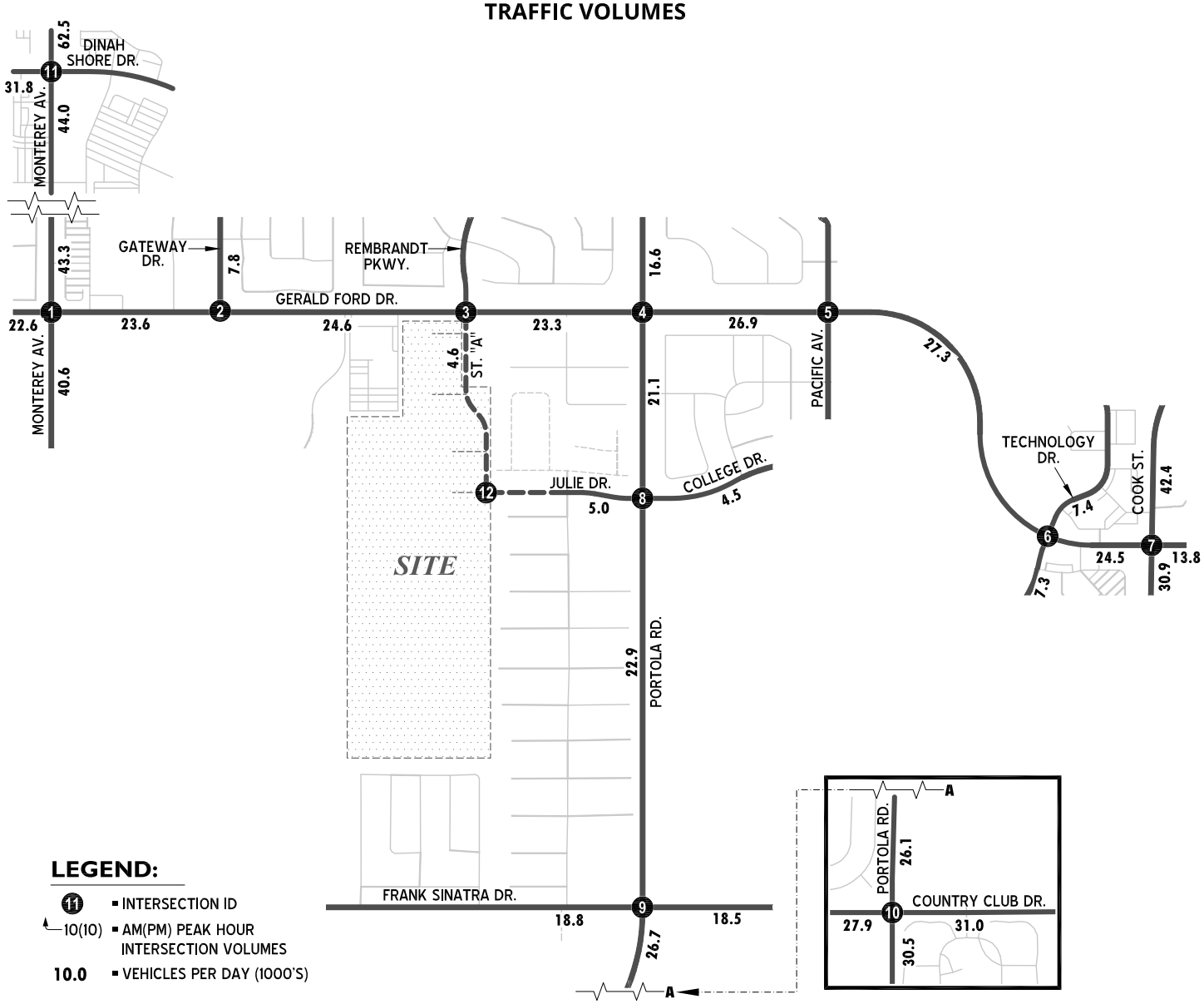
6.3 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under EAPC (2027) traffic conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown on Table 6-1, the study area intersections are anticipated to continue to operate at an acceptable LOS (LOS "D" or better) under EAPC (2027) traffic conditions. The intersection operations analysis worksheets for EAPC (2027) traffic conditions are included in Appendix 6.1 of this TA.

6.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAPC (2027) traffic conditions are provided in Appendix 3.3. For EAPC (2027) traffic conditions, the intersection of Rembrandt Parkway/Gerald Ford Drive (#3) appears to warrant a traffic signal based on both peak hour traffic flows and ADT volumes (see Appendix 3.3). The unsignalized intersections are not anticipated to meet peak hour volume-based warrants and daily volume-based warrants for EAPC (2027) traffic conditions.

EXHIBIT 6-1: EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE (2027) TRAFFIC VOLUMES



1 Monterey Av. & Gerald Ford Dr. 167(258) 186(1167) 88(177) → 166(183) 564(548) 194(220) 193(261) 397(557) 147(97) → 105(128) 772(1329) 101(226)	**2** Gateway Dr. & Gerald Ford Dr. 89(174) 197(185) → 141(164) 847(813) 59(122) 527(838) →	**3** Rembrandt Pkwy.-St. "A" & Gerald Ford Dr. 44(24) 1(2) 50(20) → 24(41) 814(857) 33(98) 18(41) 613(877) 50(149) → 139(92) 21(60) 92(60)	**4** Portola Rd. & Gerald Ford Dr. 2(11) 344(486) 87(168) → 184(142) 686(790) 97(184) 13(8) 555(718) 211(221) → 182(202) 394(508) 96(208)	**5** Pacific Av. & Gerald Ford Dr. 136(297) 73(153) 172(345) → 142(339) 799(765) 19(28) 107(314) 590(737) 41(44) → 31(54) 69(158) 25(17)	**6** Technology Dr. & Gerald Ford Dr. 101(207) 27(32) 80(96) → 64(62) 780(722) 49(106) 129(177) 535(778) 123(144) → 80(204) 41(130) 113(103)
7 Cook Street & Gerald Ford Dr. 465(405) 1500(786) 188(184) → 140(175) 292(306) 32(64) 418(605) 196(331) 142(139) → 146(216) 603(1153) 31(28)	**8** Portola Rd. & College Dr.-Julie Dr. 39(67) 572(725) 40(99) → 60(41) 23(54) 74(87) 50(67) 66(44) 115(73) → 41(109) 611(816) 42(76)	**9** Portola Rd. & Frank Sinatra Dr. 86(101) 62(698) 54(86) → 26(33) 672(401) 155(132) 80(123) 331(666) 138(124) → 131(145) 618(864) 72(111)	**10** Portola Rd. & Country Club Dr. 86(113) 641(675) 146(180) → 142(250) 776(623) 204(263) 71(108) 430(851) 189(245) → 272(220) 580(755) 208(237)	**11** Monterey Av. & Dinah Shore Dr. 348(350) 1513(1201) 542(601) → 425(884) 291(496) 97(148) 279(555) 298(432) 197(303) → 155(338) 771(1381) 68(133)	**12** St. "A" & Julie Dr. 44(132) 79(70) → 47(88) 25(75) 123(81) 70(47) →

6.5 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

The study area intersections are anticipated to operate at an acceptable LOS with the site access and off-site roadway improvements described in Section 7 of this report.

The effectiveness of the proposed recommended improvements is presented in Table 6-1 for EAPC (2027) traffic conditions. Recommended improvements to provide acceptable operations for EAP (2027) and EAPC (2027) traffic conditions at the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection include the following:

- Install traffic signal
- NB Approach: Shared left/thru lane and separate right turn
- WB Approach: 1 WB left turn lane
- EB Approach: 1 EB right turn lane

The intersection operations analysis worksheets for EAPC (2027) traffic conditions, with improvements, is included in Appendix 6.1 of this TA.

TABLE 6-1: INTERSECTION ANALYSIS FOR EAPC (2027) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Monterey Av. / Gerald Ford Dr.	TS	2	3	0	2	3	1	2	2	1	2	2	1	32.2	38.0	C	D
2	Gateway Dr. / Gerald Ford Dr.	TS	0	0	0	1	0	1	1	2	0	0	3	1	13.2	14.1	B	B
3	Rembrandt Pkwy. / Gerald Ford Dr.	CSS	0	0	0	1	0	d	1	2	0	0	3	1	>50	>50	F	F
	- With Improvements	**TS**	**0.5**	**0.5**	1	0.5	0.5	d	1	2	**1**	**1**	3	1	31.3	24.7	C	C
4	Portola Rd. / Gerald Ford Dr.	TS	2	3	1	2	3	1	1	2	d	2	3	1	36.7	37.5	D	D
5	Pacific Av. / Gerald Ford Dr.	TS	1	2	0	1	2	0	1	3	1	1	3	1	15.8	35.8	B	D
6	Technology Dr. / Gerald Ford Dr.	TS	1	1	1	1	1	0	1	3	1	1	3	1	22.1	22.8	C	C
7	Cook St. / Gerald Ford Dr.	TS	2	3	1	2	3	1	2	2	1>>	2	2	1	35.2	36.7	D	D
8	Portola Rd. / Julie Dr. - College Dr.	TS	1	3	1	1	3	0	1	1	0	1	1	1	20.6	25.7	C	C
9	Portola Rd. / Frank Sinatra Dr.	TS	1	3	d	1	3	0	1	2	1	1	2	1	30.3	26.7	C	C
10	Portola Rd. / Country Club Dr.	TS	1	2	1	1	2	d	1	2	1	1	2	1	47.3	48.3	D	D
11	Monterey Av. / Dinah Shore Dr.	TS	2	3	0	2	3	1>>	2	2	1	2	2	1	36.1	53.0	D	D
12	St. "A" / Julie Dr.	**RDB**	0	0	0	0	**1!**	0	**0.5**	**0.5**	0	0	**1**	0	4.0	4.2	A	A

[1] TS = Traffic Signal; CSS = Cross-street Stop; RDB = Roundabout designed per FHWA standards

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; >> = Free-Right Turn Lane; **1** = Improvement

[3] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

7 SITE ACCESS AND OFF-SITE ROADWAY IMPROVEMENTS

The Project is proposed to be served by a north/south roadway labeled Street "A" and an east/west roadway which is the extension of Julie Drive. Street "A" connects to Gerald Ford Drive at the existing Rembrandt Parkway/Gerald Ford Drive intersection (#3). The Julie Drive extension connects to Portola Road at the existing Portola Road / Julie Drive-College Drive intersection (#8).

7.1 STREET "A" IMPROVEMENTS

Based upon projected daily traffic volumes, Street "A" south of Gerald Ford Drive is recommended to be improved as a 2 lane local collector with a minimum curb-to-curb width of 44' between Gerald Ford Drive and Julie Drive. The pavement width of 44' is able to also accommodate shared bicycle & golf cart lanes between Gerald Ford Drive and the Project's southerly boundary as indicated on Exhibit 7-1.

Along Street "A" between Gerald Ford Drive and Julie Drive, there are two access driveways serving PA 1 and one driveway serving PA 2.

The lane geometrics recommended at the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection include a northbound shared left/through lane and separate right turn lane as shown on Exhibit 7-1. For the eastbound and westbound approach to the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection, a single eastbound right turn and single westbound left turn lane are also needed. Installation of a traffic signal at this location is warranted in conjunction with the Project.

For the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection, the northbound right turn lane should provide 125' of storage. The westbound left turn lane (on Gerald Ford Drive) should provide 150' of storage. The eastbound right turn lane (on Gerald Ford Drive) should provide 150' of storage.

All of the improvements described above regarding implementation of Street "A" access improvements are recommended to be accomplished prior to occupancy of the 1st dwelling unit in Planning Area 1.

A complete Signing and Striping plan showing all of the above improvements and signed by a licensed Civil or Traffic Engineer will be submitted for approval by the City prior to construction.

7.2 GERALD FORD DRIVE PARKWAY IMPROVEMENTS

Along the Project boundary, the south side of Gerald Ford Drive currently exists with two eastbound vehicle lanes, a bicycle/golf cart lane, and curb/gutter. The Project should construct the sidewalk along the Project frontage, connecting to the existing sidewalk that currently terminates near the westerly Project boundary.

7.3 JULIE DRIVE IMPROVEMENTS

Julie Drive is recommended to be improved as a collector with a minimum curb-to-curb width of 52' between Portola Road and the Project PA2/PA3 local street intersection west of Street "A". The westerly extension of Julie Drive connects the Project to the existing segment of Julie Drive which is the west leg of the existing Portola Road at Julie Drive – College Drive intersection. The 52' pavement section accommodates a 12' raised median and two 20' travel lanes. The 52' cross-section is able to also accommodate shared bicycle & golf cart lanes between Portola Road and the PA 2/PA3 local street intersection.

Consistent with the Palm Desert General Plan Proposed Bicycle & Golf Network, golf carts are permitted on Julie Drive, which provides golf cart connectivity between the Project and Portola Road.

The lane geometrics recommended at the Portola Road / Julie Drive – College Drive intersection include the existing eastbound left turn lane and shared through/ right lane as shown on Exhibit 7-1. At the eastbound approach to the Portola Road / Julie Drive – College Drive intersection, the existing 60' right turn lane should be lengthened to provide 125' of storage.

The intersection of Street "A" / Julie Drive (#12) is proposed as a roundabout intersection designed per FHWA standards, with north, east, and west legs. The extension of Julie Drive west of Street "A" serves as the primary access to Planning Areas (PAs) 3 through 6 of the Project and also provides a secondary access to PA 2.

Implementation of Julie Drive access improvements are recommended to be accomplished prior to occupancy of the 1st dwelling unit in Planning Areas 2 to 6.

A complete Signing and Striping plan showing all of the above improvements and signed by a licensed Civil or Traffic Engineer will be submitted for approval by the City prior to construction.

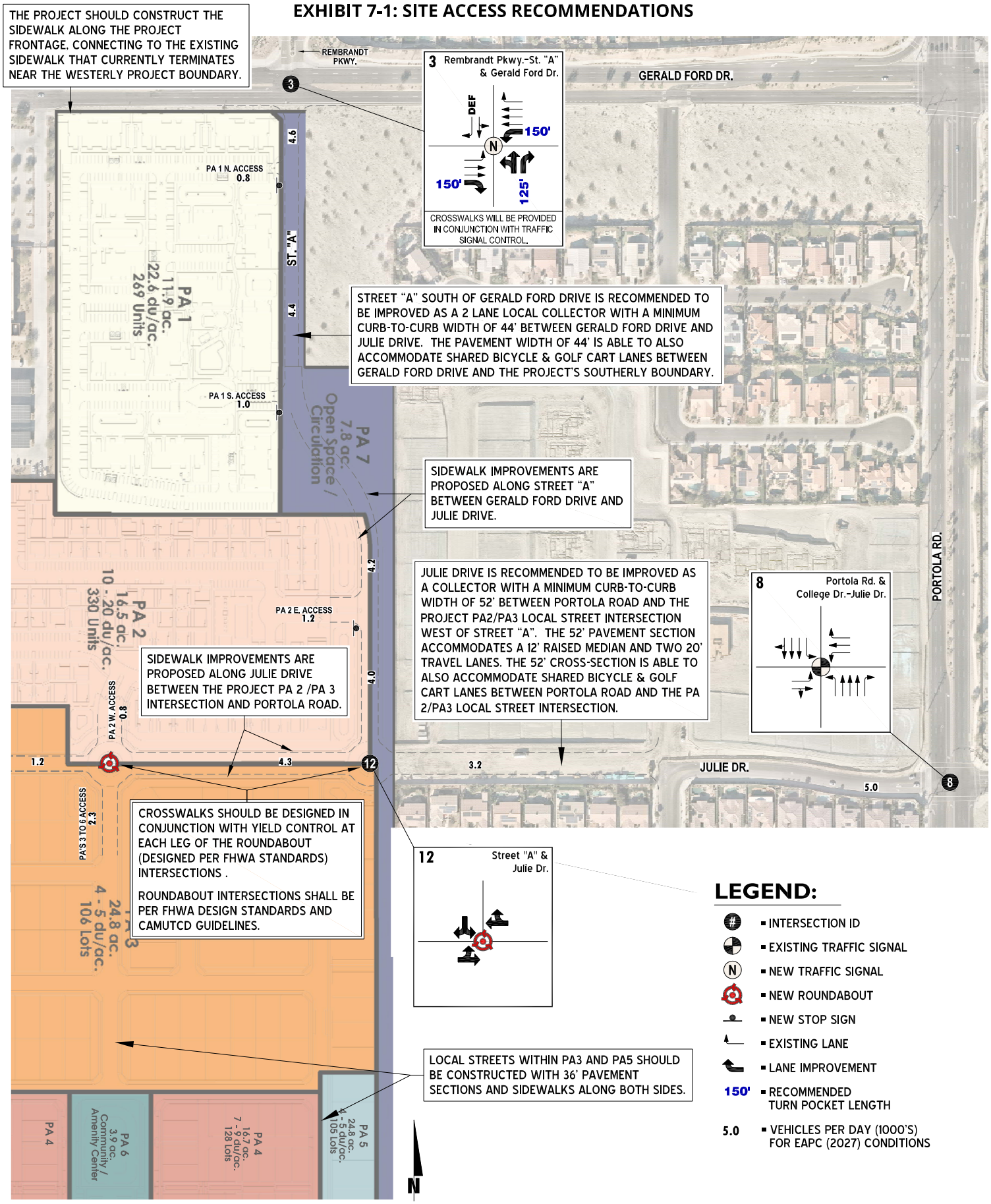
7.4 PEDESTRIAN ACCOMMODATIONS

Sidewalk improvements are proposed along Street "A" between Gerald Ford Drive and Julie Drive. At the Street "A" – Rembrandt Parkway / Gerald Ford Drive intersection, crosswalks will be provided in conjunction with traffic signal control. At the Street "A" / Julie Drive roundabout designed per FHWA standards, crosswalks should be designed in conjunction with yield control at each leg of the intersection.

Along Julie Drive between the PA2/PA3 local street intersection and the Portola Road / Julie Drive – College Drive intersection sidewalks are proposed on both sides of the roadway. At the Portola Road / Julie Drive – College Drive intersection, crosswalks are provided at the existing traffic signal. PA2/PA3 at Julie Drive is proposed as a roundabout intersection designed per FHWA standards and crosswalks should be designed in conjunction with yield control at each leg of the intersection.

Local streets within PA3 and PA5 should be constructed with 36' pavement sections and sidewalks along both sides.

EXHIBIT 7-1: SITE ACCESS RECOMMENDATIONS



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8 REFERENCES

1. **Riverside County Transportation Department.** *Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled.* County of Riverside : s.n., December 2020.
2. **Transportation Research Board.** *Highway Capacity Manual (HCM), 6th Edition.* s.l. : National Academy of Sciences, 2016.
3. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated March 30, 2021 (Revision 6).
4. **Institute of Transportation Engineers.** Trip Generation Manual. 11th Edition, 2021.

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APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

April 7, 2022

Mr. Randy Bowman
City of Palm Desert
73510 Fred Waring Drive
Palm Desert, CA 92260

SUBJECT: VITALIA/REFUGE PALM DESERT RESIDENTIAL LEVEL OF SERVICE (LOS) AND VEHICLE MILES TRAVELED (VMT) SCOPING AGREEMENT

Dear Mr. Randy Bowman:

Urban Crossroads, Inc. is pleased to resubmit this scoping letter to City of Palm Desert regarding the Level of Service (LOS) and Vehicle Miles Traveled (VMT)for the proposed Vitalia/Refuge Palm Desert Residential development ("Project"), which is located west of Rembrandt Parkway and south of Gerald Ford Drive in the City of Palm Desert. It is our understanding that the Project is to consist of 969 residential dwelling units, of which 248 are single family detached, 302 are rental homes, 150 are paired housing, and 269 are apartments.

The remainder of this letter describes the proposed analysis methodology, Project trip generation, trip distribution, and Project traffic assignment/project trips on the surrounding roadway network. The following scoping assumptions have been prepared in accordance with the County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020) as the City of Palm Desert utilizes the County guidelines.

A preliminary site plan the proposed Project is shown on Exhibit 1. Exhibit 2 depicts the location of the proposed project in relation to the existing roadway network. It is anticipated that the Project would be fully developed by year 2027. Project will have full access at the Rembrandt Parkway future extension and at the future extension of Julie Drive.

TRIP GENERATION

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition, 2021) manual for the proposed land uses (ITE Land Use Codes: 210, 215, and 220) are used. Table 1 presents the trip generation rates and the resulting trip generation summary for the proposed Project. As shown in Table 1, the Project is anticipated to generate a net total of 7,267trip-ends per day with 476 AM peak hour trips and 607 PM peak hour trips.

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibit 3 presents the Project

distribution pattern. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4.

ANALYSIS SCENARIOS

Consistent with the County's LOS guidelines, intersection analysis will be provided for the following analysis scenarios:

- Existing (2022) Conditions
- Existing plus Ambient plus Project (EAP) (2027)
- Existing plus Ambient plus Project plus Cumulative (EAPC) (2027)

EAP traffic conditions will be utilized to determine direct Project traffic impacts, while the Interim Year (2027) With Project analysis will be utilized to determine the Project's cumulatively considerable impacts (subject to payment of fees/fair share).

The City of Palm Desert General Plan Circulation Element is depicted on Exhibit 5, while the accompanying roadway cross-sections are presented on Exhibit 6.

STUDY AREA

The traffic impact study area was defined in conformance with the requirements of County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled. Consistent with the County's LOS guidelines, study area intersections have been identified for the Project based on the contribution of 50 or more peak hour trips. Based on this criterion, anticipated trip generation and trip distribution, the following intersections will be evaluated:

ID	Intersection Location	ID	Intersection Location
1	Monterey Avenue / Gerald Ford Drive	7	Cook Street / Gerald Ford Drive
2	Gateway Drive / Gerald Ford Drive	8	Portola Road / College Drive – Julie Drive
3	Rembrandt Parkway – Street "A"/ Gerald Ford Drive	9	Portola Road / Frank Sinatra Drive
4	Portola Road / Gerald Ford Drive	10	Portola Road / Country Club Drive
5	Pacific Avenue / Gerald Ford Drive	11	Monterey Avenue / Dinah Shore Drive
6	Technology Drive / Gerald Ford Drive		

Exhibit 2 identifies the proposed study area intersection analysis locations.

LEVEL OF SERVICE (LOS) CRITERIA

Per the City of Palm Desert's General Plan, LOS D as the threshold for acceptable traffic conditions on the circulation network.

PREFERRED ANALYSIS METHODOLOGY

For the purposes of this analysis, signalized intersection operations analysis will be based on the methodology described in the Highway Capacity Manual (6th Edition). Intersection LOS operations are based on an intersection's average control delay. Unsignalized intersections will be evaluated using the methodology described in the HCM 6th Edition. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane.

EXISTING 2022 VOLUMES

For the existing study area intersections, new traffic counts will be collected in April 2022 during the following timeframes: 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

CUMULATIVE DEVELOPMENT TRAFFIC

It is requested that City staff review the list of cumulative development projects (shown on Exhibit 7 and listed on Table 2) for inclusion in the traffic study. Consistent with other studies performed in the area, an ambient growth rate of 2% per year will be utilized as a minimum if necessary. The rate will be compounded over a 5-year period (i.e., 1.02^{5years} = 1.104 or 10.4%) for Interim Year (2027) conditions. Where available, mitigation measures from the traffic studies prepared for nearby cumulative developments will be reviewed for consistency with the findings of this Project traffic analysis.

VEHICLE MILES TRAVELED (VMT) SCREENING

The VMT screening assessment will be prepared under separate cover. The California Environmental Quality Act (CEQA) procedures for determination of transportation impacts have recently changed to an evaluation of Vehicle Miles Traveled (VMT) rather than vehicle delay or level of service, due to Senate Bill 743 (SB 743). County of Riverside VMT screening guidelines will be applied to the project.

Please review this scoping agreement let us know if it is acceptable, or if the City requests any changes to this proposed scope of work. If you have any questions, please contact John Kain at (949) 375-2435 or Marlie Whiteman (714) 585-0574.

Respectfully submitted,

URBAN CROSSROADS, INC.

John Kain

John Kain, AICP
Principal

Marlie Whiteman

Marlie Whiteman, PE
Senior Associate

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Trip Generation Rates[1]									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	248 DU	0.18	0.52	0.70	0.59	0.34	0.93	9.43
Rental Homes	220	302 DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74
Paired Housing	215	150 DU	0.15	0.33	0.48	0.32	0.25	0.57	7.20
Apartments	220	269 DU	0.10	0.30	0.40	0.32	0.19	0.51	6.74

Trip Generation Results									
	ITE LU		AM Peak Hour			PM Peak Hour			
Land Use	Code	Quantity[2]	In	Out	Total	In	Out	Total	Daily
Single Family Detached	210	248 DU	45	129	174	146	84	230	2,339
Rental Homes	220	302 DU	30	91	121	97	57	154	2,035
Paired Housing	215	150 DU	23	50	73	48	38	86	1,080
Apartments	220	269 DU	27	81	108	86	51	137	1,813
TOTAL			**125**	**351**	**476**	**377**	**230**	**607**	**7,267**

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

[2] DU = Dwelling Unit

F:\UXRjobs_14600-15000\14702\Excel\[14702 - Scope.xlsx]Trip Gen

EXHIBIT 1: PRELIMINARY SITE PLAN

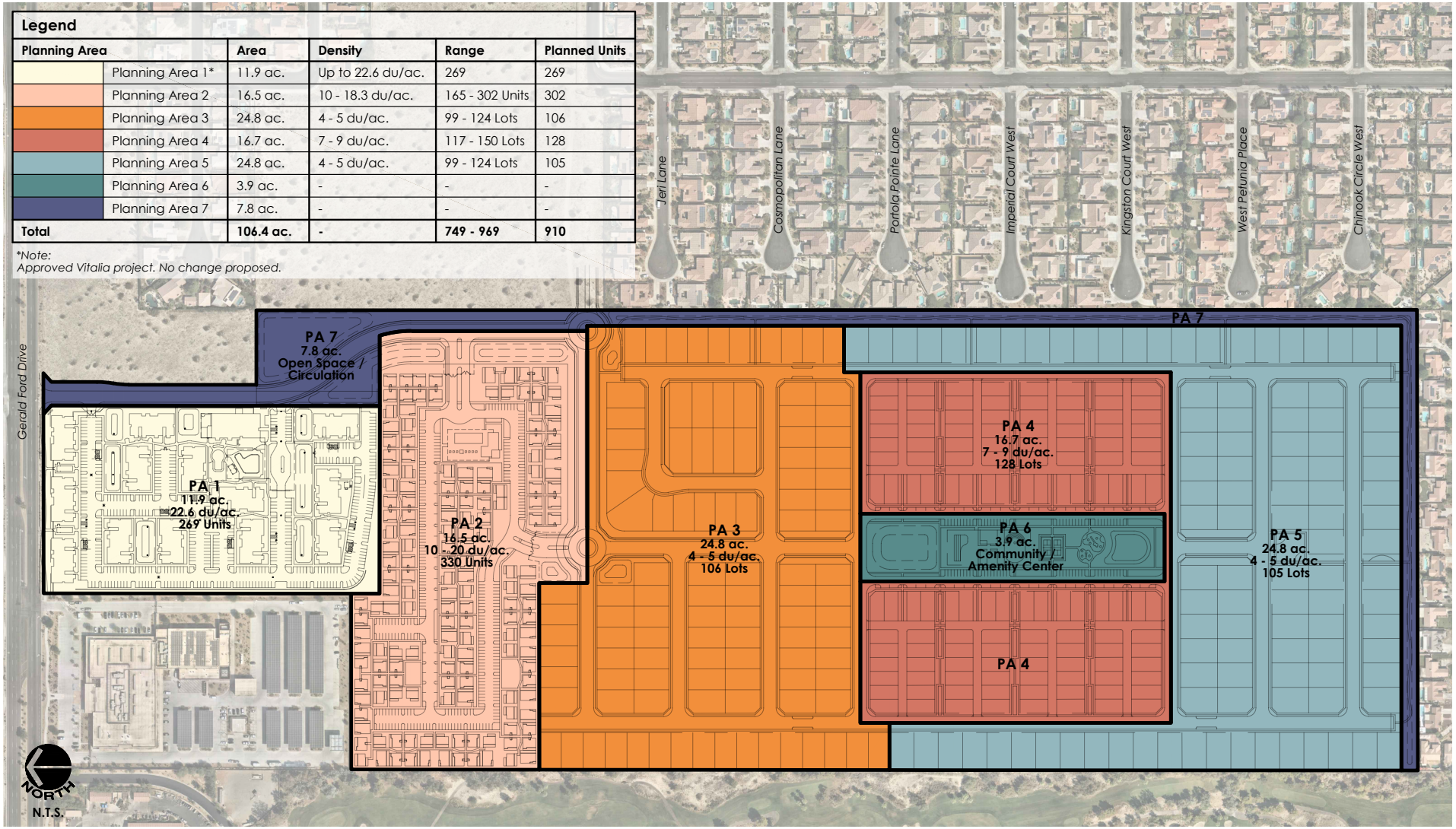


EXHIBIT 2: TRAFFIC ANALYSIS STUDY AREA

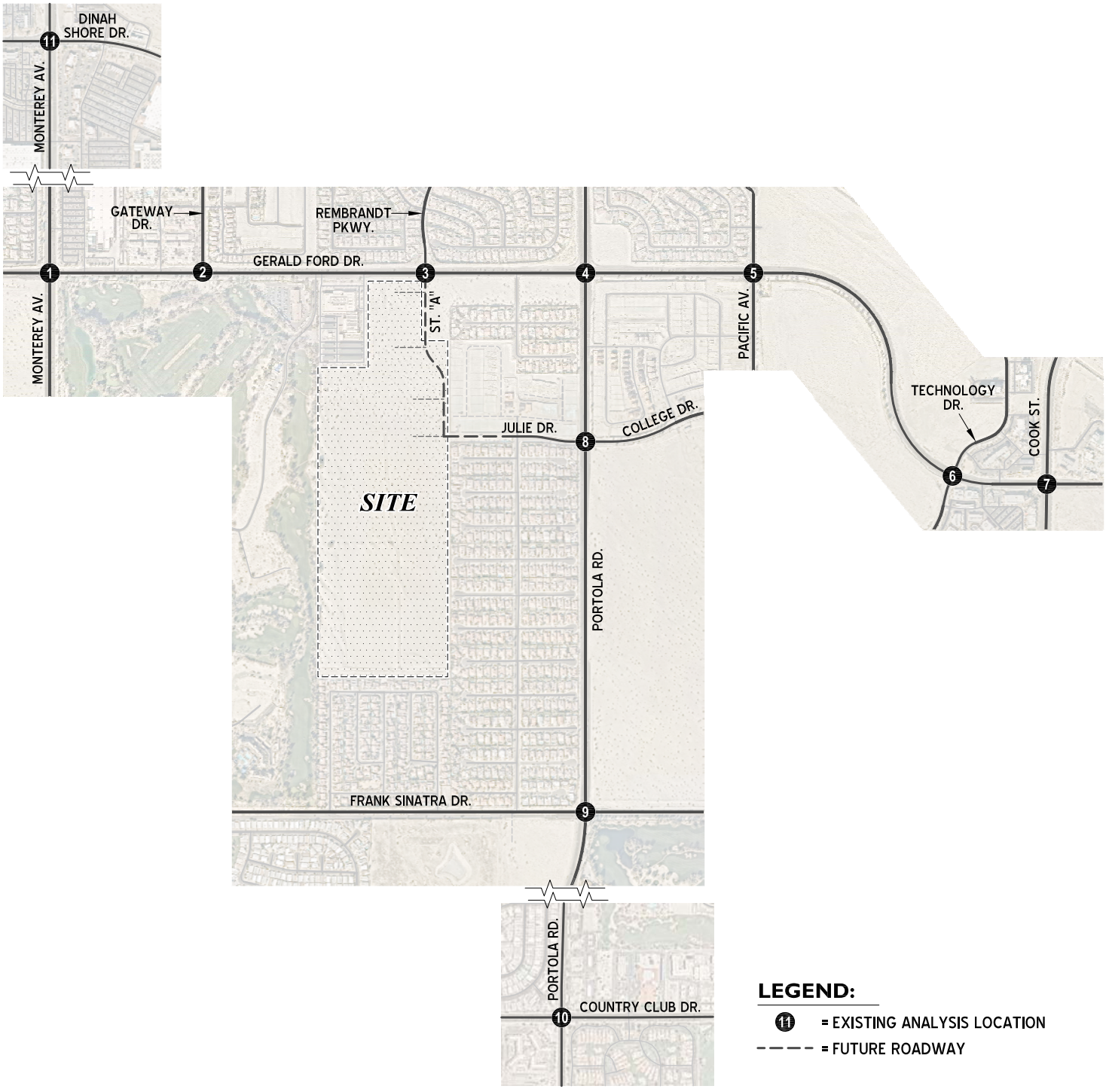


EXHIBIT 3: PROJECT TRIP DISTRIBUTION

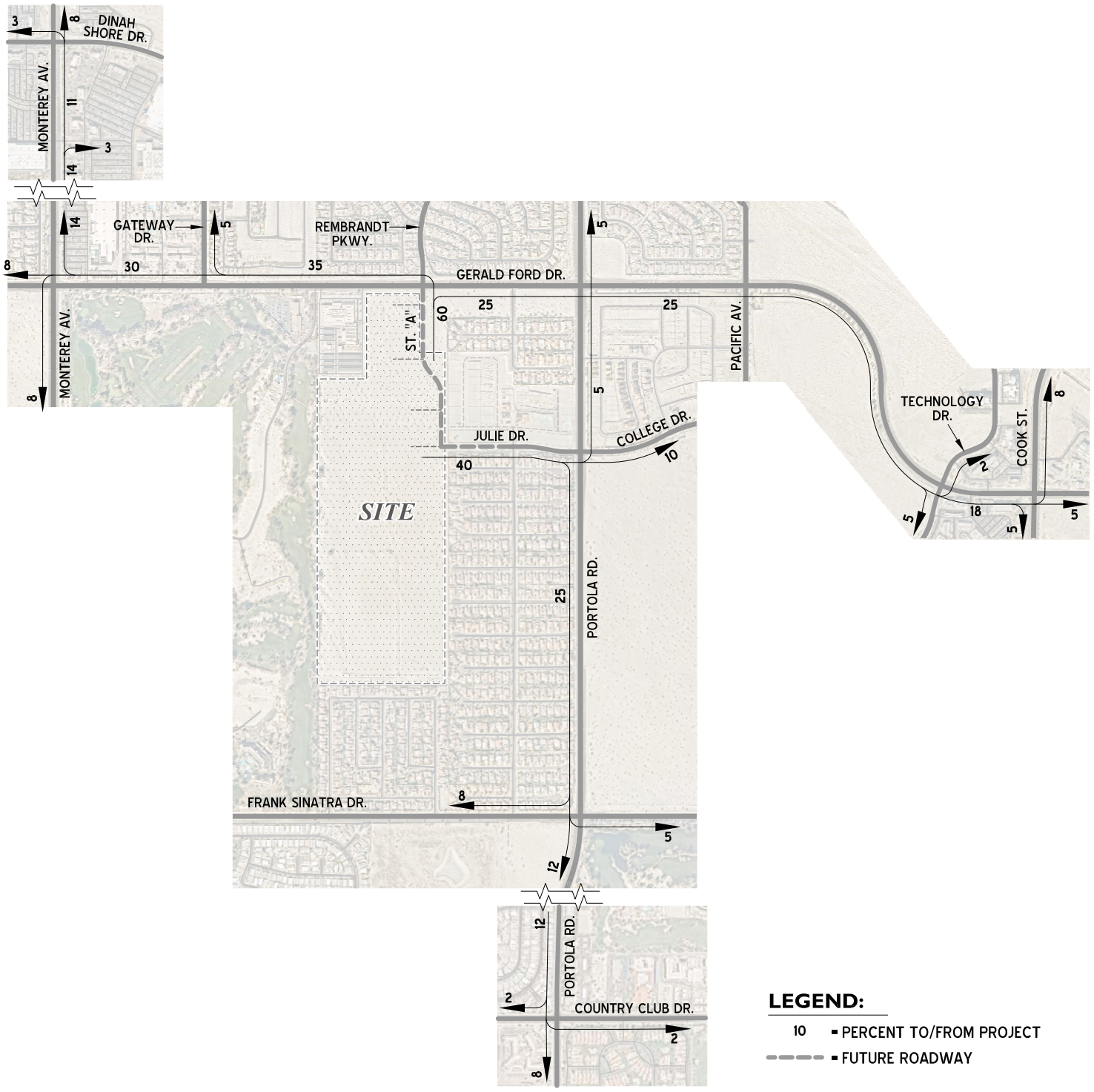
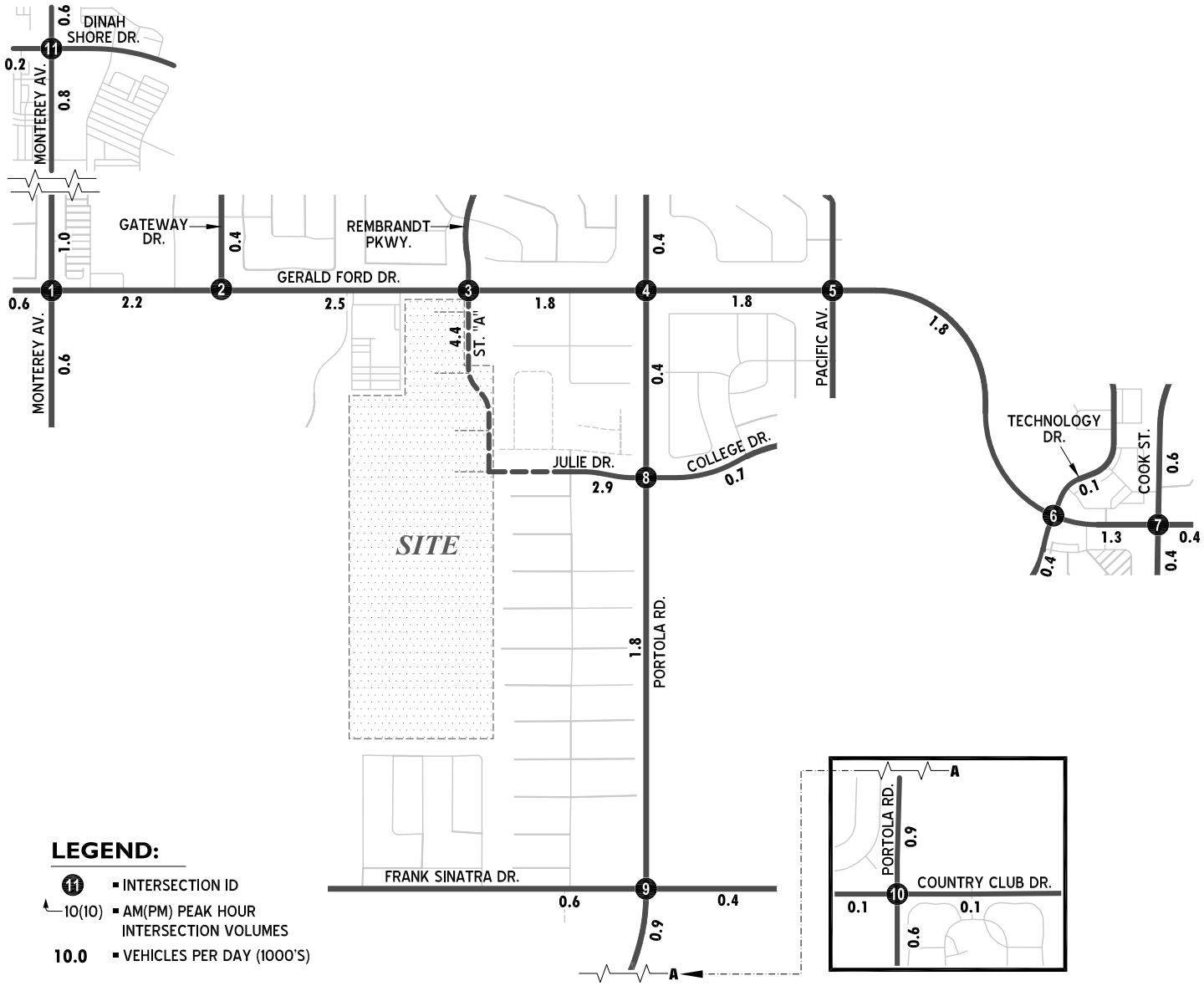


EXHIBIT 4: PROJECT ONLY TRAFFIC VOLUMES



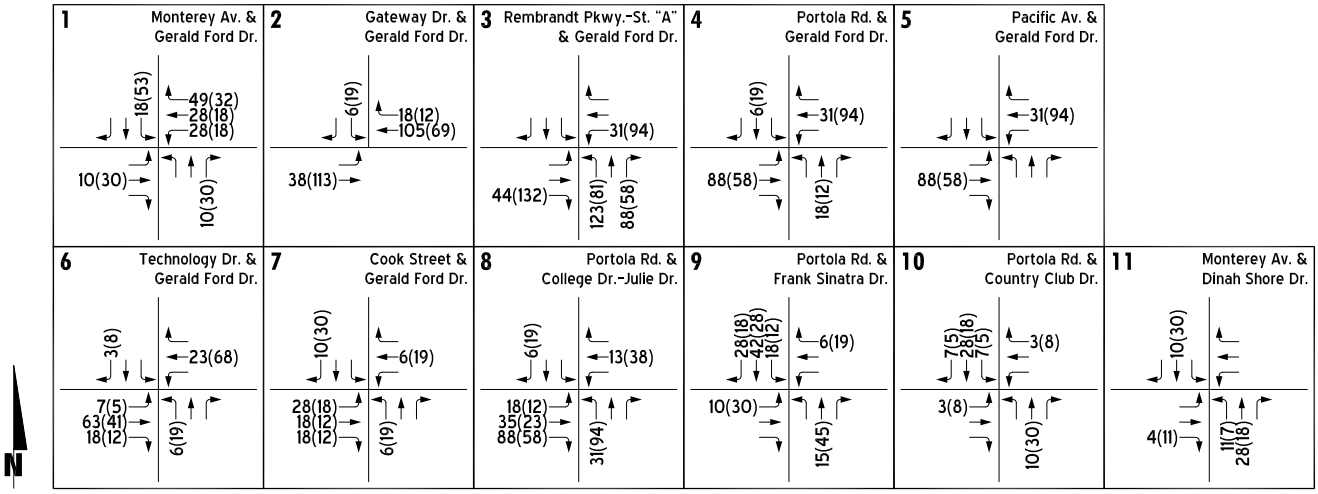


EXHIBIT 5: CITY OF PALM DESERT GENERAL PLAN CIRCULATION ELEMENT

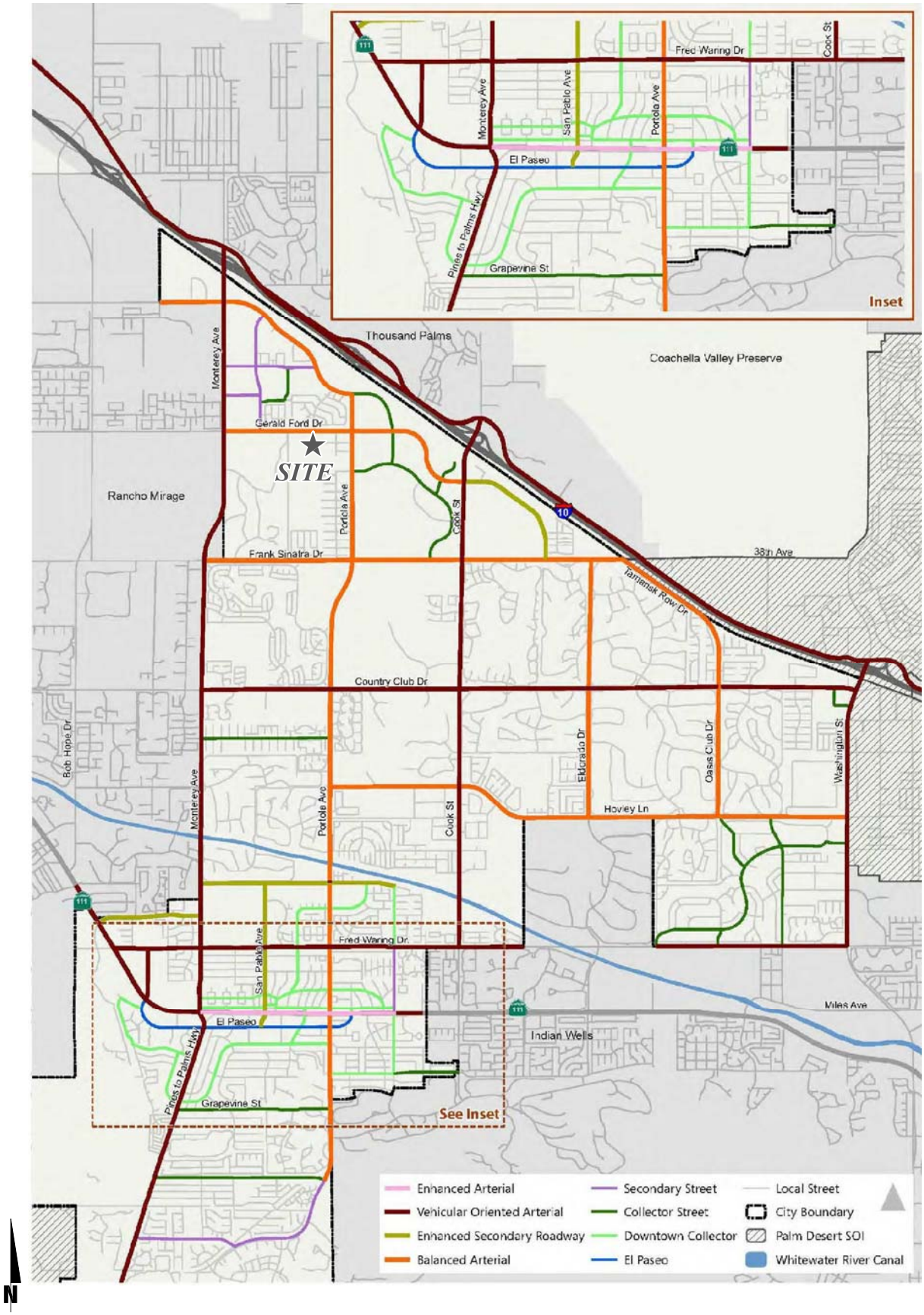
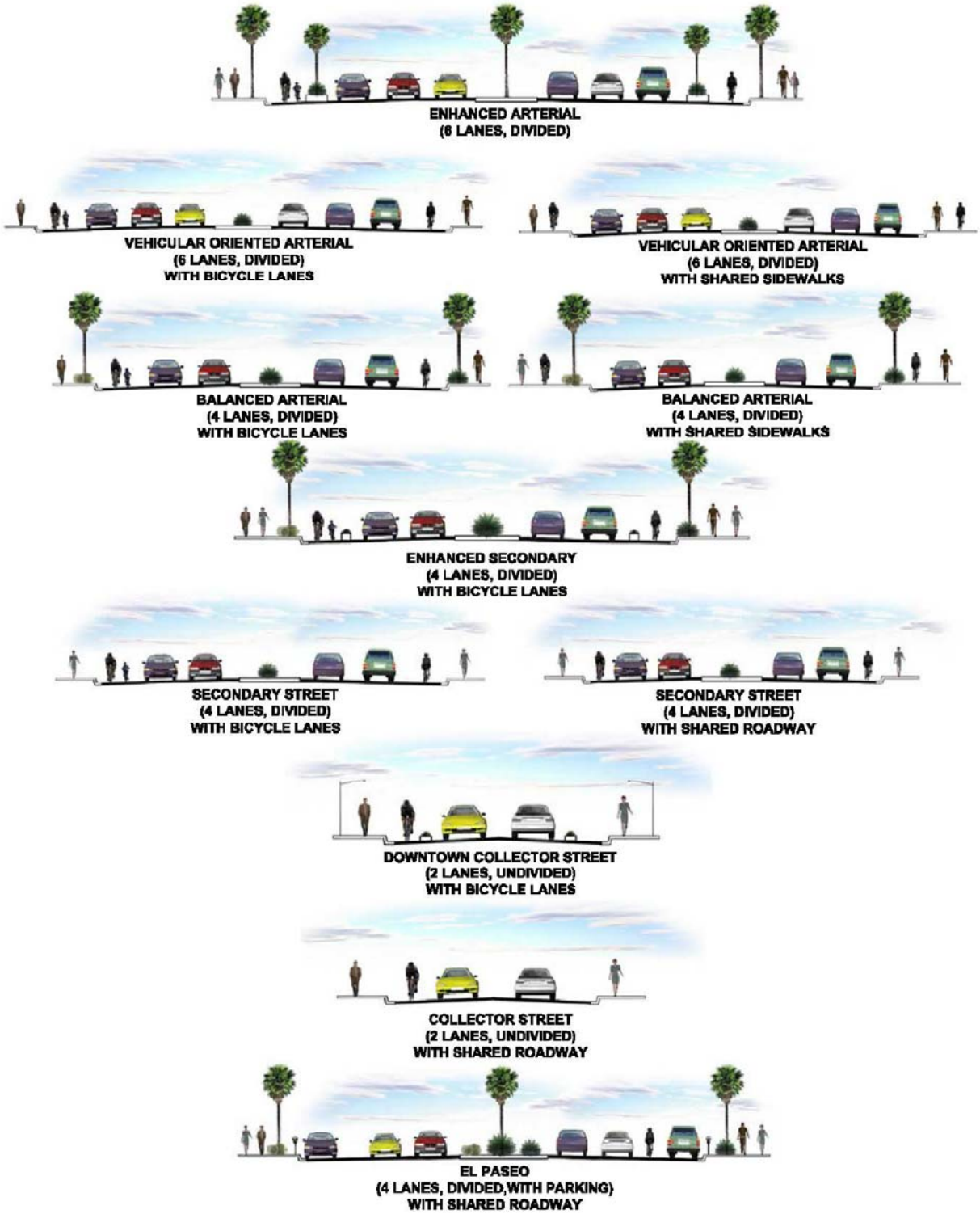
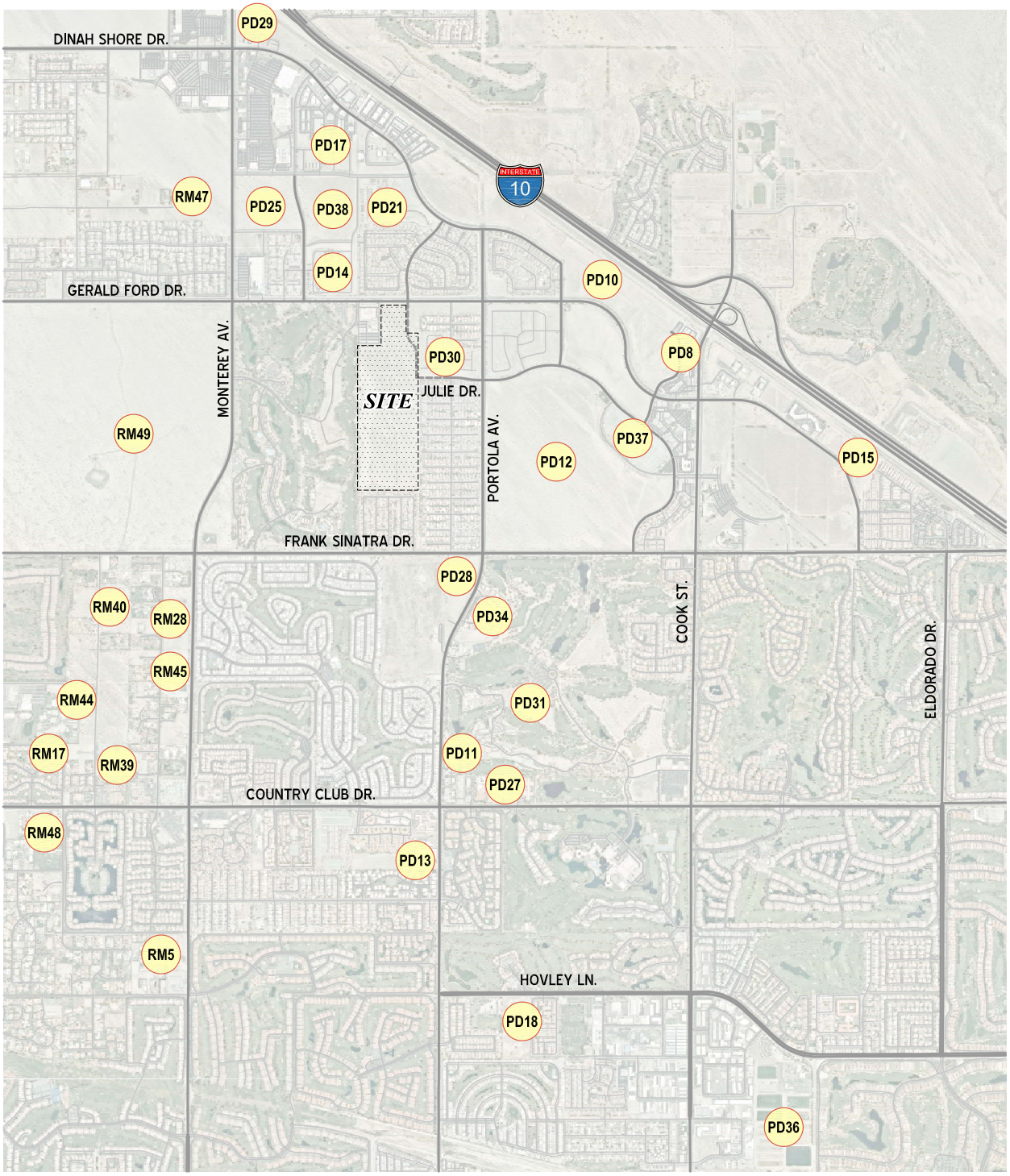


EXHIBIT 6: CITY OF PALM DESERT GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF PALM DESERT

EXHIBIT 7: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

(#) = CUMULATIVE DEVELOPMENT ID

N

TABLE 2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use[1]	Quantity	Units[2]
CITY OF PALM DESERT				
PD8	Fairfield Inn & Suites Marriott Hotel	Hotel	108	RM
PD10	Millennium Palm Desert	SFDR	166	DU
		Multi-Family	612	DU
		Commercial	551.0	TSF
		Hotel	250	RM
PD11	Scotelle Office Building	Commercial	10.732	TSF
PD12	University Park	SFDR	773	DU
		Multi-Family	336	DU
PD13	Villa Portofino	Congregate Care	161	DU
		Assisted Living	150	DU
		SFDR	288	DU
		Multi-Family	182	DU
PD14	Dolce	SFDR	159	DU
PD15	Spanish Walk	Multi-Family	150	DU
PD17	Falling Waters	SFDR	159	DU
PD18	The Sands Apartments	Apartments (with 20% affordable housing)	388	DU
PD21	Ponderosa II	SFDR	111	DU
		Multi-Family	114	DU
PD25	Monterey Specific Plan	Multi-Family	384	DU
		Commercial	120.0	TSF
PD27	Wolff Cottages	Senior Adult Living	167.0	DU
PD28	Portola Av./Frank Sinatra Dr. Residential	Multi-Family	402	DU
PD29	Monterey Crossings	Commercial	120.0	TSF
PD30	Santa Barbara Apartment	Multi-Family	48	DU
PD31	Desert Surf	Resort Hotel	350	RM
		Surf Lagoon	1350	Guests
		Shopping Center	4.0	TSF
		High-Turnover (Sit-Down) Restaurant	11.250	TSF
PD34	The Retreat at Desert Willow	Condominiums	112	DU
PD36	Laboratory/Office Space Building	Laboratory/Office Space	20.5	TSF
PD37	Lennar	Single Family - Attached Residential	196	DU
PD38	Urban Crossings (UHC)	Multi-Family	176	DU
CITY OF RANCHO MIRAGE				
RM5	PDP 13003/FDP 13004	SFDR	32	DU
RM17	TTM 36623/PDP 14003	SFDR	17	DU
RM28	TTM 32308 (Los Ranchos)	SFDR	7	DU
RM39	TPM 34233	SFDR	4	DU
RM40	TPM 34741	SFDR	4	DU
RM44	TPM 36683	SFDR	1	DU
RM45	TPM 36849	SFDR	3	DU
RM47	Monterey Medical Center	Medical Office	75.164	TSF
RM48	Pulte Homes / Del Webb	Assisted Living	84	Beds
RM49	Section 31 Specific Plan	Hotel	400	RM
		Retail	175.0	TSF
		Multi-Family (Mid Rise)	832	DU
		Single Family	1100	DU

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; RM = Rooms

F:\UXRjobs_14600-15000\14702\Excel\[14702 - Scope.xlsx]CM List

APPENDIX 3.1: TRAFFIC COUNTS – MARCH AND APRIL 2022

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Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Palm Desert
N/S: Monterey Avenue
E/W: Gerald Ford Drive
Weather: Clear

File Name : 01_PLD_Mont_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Monterey Avenue Southbound				Gerald Ford Drive Westbound				Monterey Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	157	19	188	12	85	11	108	12	91	5	108	21	56	12	89	493
07:15 AM	9	162	15	186	19	84	16	119	17	110	10	137	8	39	25	72	514
07:30 AM	13	251	22	286	18	115	13	146	12	91	7	110	12	55	30	97	639
07:45 AM	9	317	26	352	24	98	16	138	29	151	4	184	20	59	29	108	782
Total	43	887	82	1012	73	382	56	511	70	443	26	539	61	209	96	366	2428
08:00 AM	9	207	20	236	21	109	15	145	25	129	5	159	24	64	33	121	661
08:15 AM	8	212	22	242	26	79	19	124	19	133	7	159	20	39	35	94	619
08:30 AM	12	243	25	280	25	66	9	100	22	146	5	173	21	57	36	114	667
08:45 AM	7	246	21	274	19	86	14	119	19	142	11	172	29	60	22	111	676
Total	36	908	88	1032	91	340	57	488	85	550	28	663	94	220	126	440	2623
Grand Total	79	1795	170	2044	164	722	113	999	155	993	54	1202	155	429	222	806	5051
Apprch %	3.9	87.8	8.3		16.4	72.3	11.3		12.9	82.6	4.5		19.2	53.2	27.5		
Total %	1.6	35.5	3.4	40.5	3.2	14.3	2.2	19.8	3.1	19.7	1.1	23.8	3.1	8.5	4.4	16	

	Monterey Avenue Southbound				Gerald Ford Drive Westbound				Monterey Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	9	**317**	**26**	**352**	24	98	16	138	**29**	**151**	4	**184**	20	59	29	108	**782**
08:00 AM	9	207	20	236	21	**109**	15	**145**	25	129	5	159	**24**	**64**	33	**121**	661
08:15 AM	8	212	22	242	**26**	79	**19**	124	19	133	**7**	159	20	39	35	94	619
08:30 AM	**12**	243	25	280	25	66	9	100	22	146	5	173	21	57	**36**	114	667
Total Volume	38	979	93	1110	96	352	59	507	95	559	21	675	85	219	133	437	2729
% App. Total	3.4	88.2	8.4		18.9	69.4	11.6		14.1	82.8	3.1		19.5	50.1	30.4		
PHF	.792	.772	.894	.788	.923	.807	.776	.874	.819	.925	.750	.917	.885	.855	.924	.903	.872

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City of Palm Desert
N/S: Monterey Avenue
E/W: Gerald Ford Drive
Weather: Clear

File Name : 01_PLD_Mont_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
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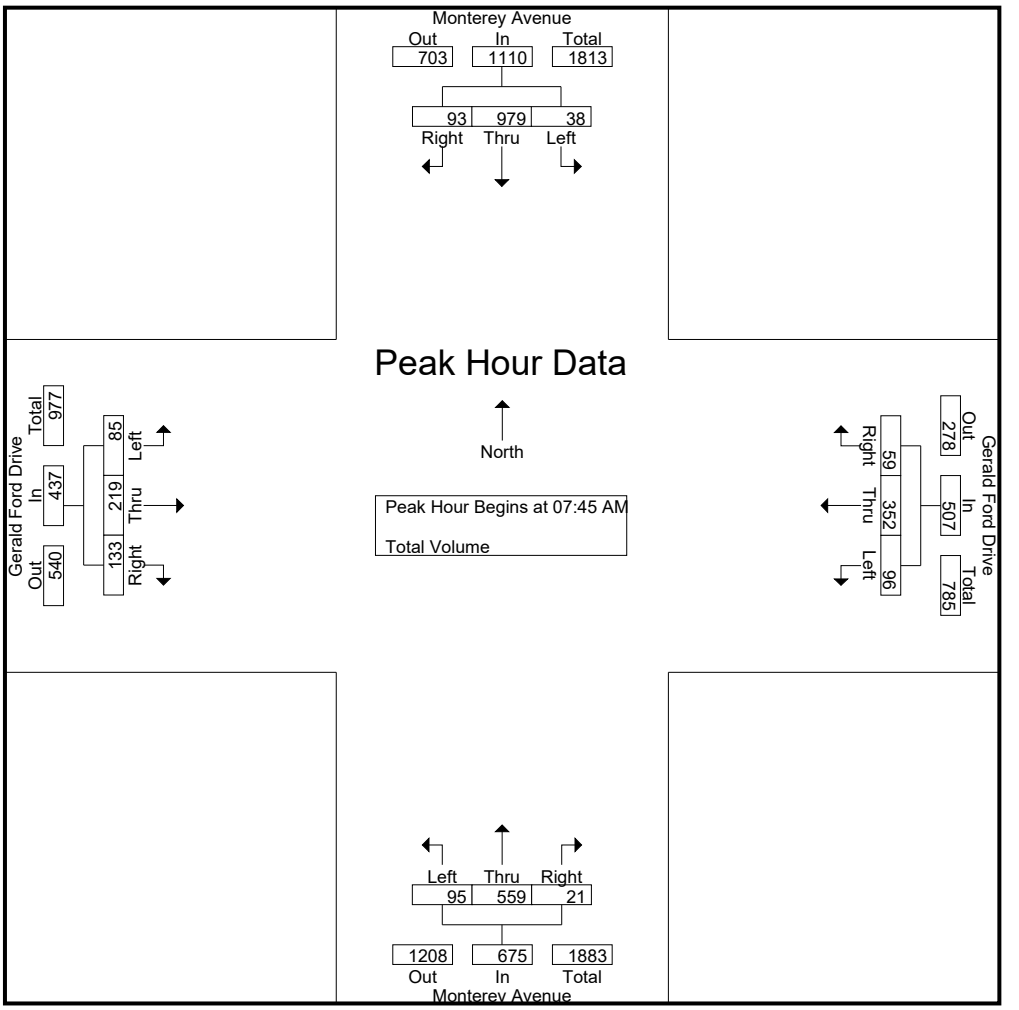

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	**13**	251	22	286	18	**115**	13	**146**	**29**	**151**	4	**184**	24	**64**	33	**121**
+15 mins.	9	**317**	**26**	**352**	24	98	16	138	25	129	5	159	20	39	35	94
+30 mins.	9	207	20	236	21	109	15	145	19	133	**7**	159	21	57	**36**	114
+45 mins.	8	212	22	242	**26**	79	**19**	124	22	146	5	173	**29**	60	22	111
Total Volume	39	987	90	1116	89	401	63	553	95	559	21	675	94	220	126	440
% App. Total	3.5	88.4	8.1		16.1	72.5	11.4		14.1	82.8	3.1		21.4	50	28.6	
PHF	.750	.778	.865	.793	.856	.872	.829	.947	.819	.925	.750	.917	.810	.859	.875	.909

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City of Palm Desert
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Site Code : 05122326
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Groups Printed- Total Volume

	Monterey Avenue Southbound				Gerald Ford Drive Westbound				Monterey Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	7	210	26	243	16	84	20	120	26	234	18	278	32	78	16	126	767
04:15 PM	7	211	30	248	20	61	14	95	46	300	20	366	26	62	28	116	825
04:30 PM	10	209	16	235	29	77	30	136	16	263	24	303	34	64	20	118	792
04:45 PM	16	208	27	251	14	56	15	85	28	261	17	306	30	47	24	101	743
Total	40	838	99	977	79	278	79	436	116	1058	79	1253	122	251	88	461	3127
05:00 PM	11	192	21	224	13	62	15	90	23	246	17	286	28	71	31	130	730
05:15 PM	9	199	20	228	26	50	19	95	39	291	14	344	39	78	28	145	812
05:30 PM	9	203	21	233	14	64	13	91	27	233	12	272	85	81	54	220	816
05:45 PM	5	190	20	215	24	53	9	86	30	226	21	277	59	84	28	171	749
Total	34	784	82	900	77	229	56	362	119	996	64	1179	211	314	141	666	3107
Grand Total	74	1622	181	1877	156	507	135	798	235	2054	143	2432	333	565	229	1127	6234
Apprch %	3.9	86.4	9.6		19.5	63.5	16.9		9.7	84.5	5.9		29.5	50.1	20.3		
Total %	1.2	26	2.9	30.1	2.5	8.1	2.2	12.8	3.8	32.9	2.3	39	5.3	9.1	3.7	18.1	

	Monterey Avenue Southbound				Gerald Ford Drive Westbound				Monterey Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	7	210	26	243	16	**84**	20	120	26	234	18	278	32	**78**	16	**126**	767
04:15 PM	7	**211**	**30**	248	20	61	14	95	**46**	**300**	20	**366**	26	62	**28**	116	**825**
04:30 PM	10	209	16	235	**29**	77	**30**	**136**	16	263	**24**	303	**34**	64	20	118	792
04:45 PM	**16**	208	27	**251**	14	56	15	85	28	261	17	306	30	47	24	101	743
Total Volume	40	838	99	977	79	278	79	436	116	1058	79	1253	122	251	88	461	3127
% App. Total	4.1	85.8	10.1		18.1	63.8	18.1		9.3	84.4	6.3		26.5	54.4	19.1		
PHF	.625	.993	.825	.973	.681	.827	.658	.801	.630	.882	.823	.856	.897	.804	.786	.915	.948

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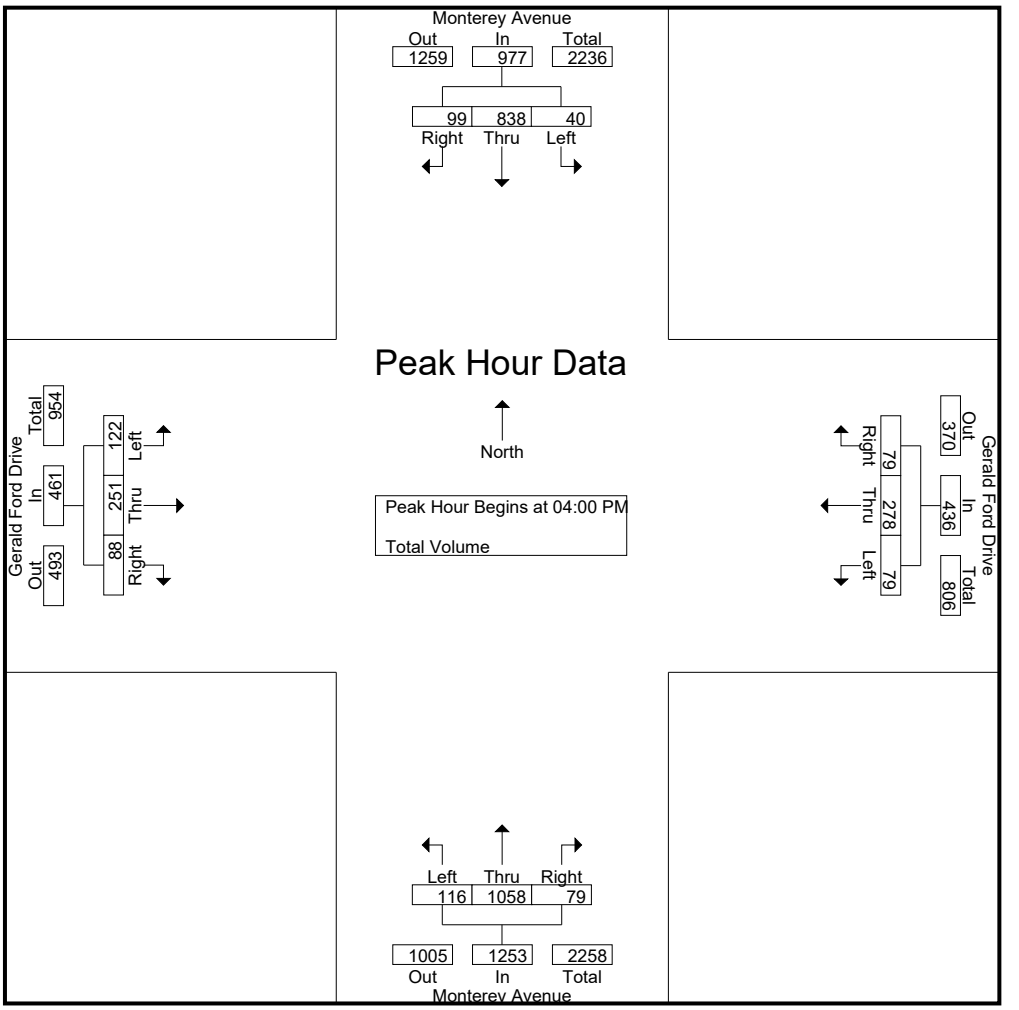

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:15 PM				05:00 PM			
+0 mins.	7	210	26	243	16	**84**	20	120	**46**	**300**	20	**366**	28	71	31	130
+15 mins.	7	**211**	**30**	248	20	61	14	95	16	263	**24**	303	39	78	28	145
+30 mins.	10	209	16	235	**29**	77	**30**	**136**	28	261	17	306	**85**	81	**54**	**220**
+45 mins.	**16**	208	27	**251**	14	56	15	85	23	246	17	286	59	**84**	28	171
Total Volume	40	838	99	977	79	278	79	436	113	1070	78	1261	211	314	141	666
% App. Total	4.1	85.8	10.1		18.1	63.8	18.1		9	84.9	6.2		31.7	47.1	21.2	
PHF	.625	.993	.825	.973	.681	.827	.658	.801	.614	.892	.813	.861	.621	.935	.653	.757

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City of Palm Desert
N/S: Gateway Drive
E/W: Gerald Ford Drive
Weather: Clear

File Name : 02_PLD_Gate_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Gateway Drive Southbound			Gerald Ford Drive Westbound			Gerald Ford Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	12	6	18	104	10	114	5	66	71	203
07:15 AM	17	5	22	105	16	121	7	51	58	201
07:30 AM	33	6	39	128	17	145	6	70	76	260
07:45 AM	38	12	50	124	35	159	2	74	76	285
Total	100	29	129	461	78	539	20	261	281	949
08:00 AM	21	4	25	134	15	149	8	81	89	263
08:15 AM	21	7	28	92	12	104	2	55	57	189
08:30 AM	26	5	31	75	12	87	6	73	79	197
08:45 AM	17	13	30	107	21	128	4	80	84	242
Total	85	29	114	408	60	468	20	289	309	891
Grand Total	185	58	243	869	138	1007	40	550	590	1840
Apprch %	76.1	23.9		86.3	13.7		6.8	93.2		
Total %	10.1	3.2	13.2	47.2	7.5	54.7	2.2	29.9	32.1	

	Gateway Drive Southbound			Gerald Ford Drive Westbound			Gerald Ford Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	17	5	22	105	16	121	7	51	58	201
07:30 AM	33	6	39	128	17	145	6	70	76	260
07:45 AM	**38**	**12**	**50**	124	**35**	**159**	2	74	76	**285**
08:00 AM	21	4	25	**134**	15	149	**8**	**81**	**89**	263
Total Volume	109	27	136	491	83	574	23	276	299	1009
% App. Total	80.1	19.9		85.5	14.5		7.7	92.3		
PHF	.717	.563	.680	.916	.593	.903	.719	.852	.840	.885

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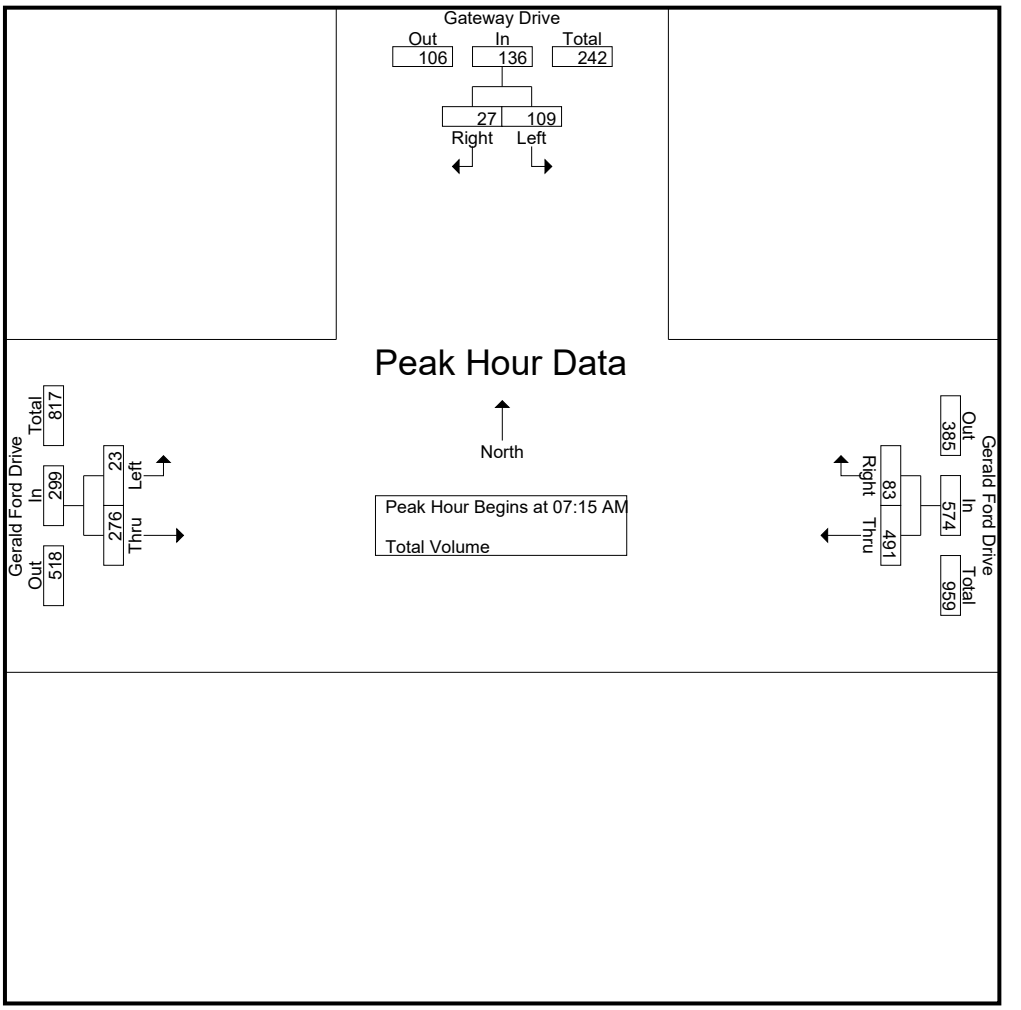

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			08:00 AM		
+0 mins.	33	6	39	105	16	121	**8**	**81**	**89**
+15 mins.	**38**	**12**	**50**	128	17	145	2	55	57
+30 mins.	21	4	25	124	**35**	**159**	6	73	79
+45 mins.	21	7	28	**134**	15	149	4	80	84
Total Volume	113	29	142	491	83	574	20	289	309
% App. Total	79.6	20.4		85.5	14.5		6.5	93.5	
PHF	.743	.604	.710	.916	.593	.903	.625	.892	.868

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City of Palm Desert
N/S: Gateway Drive
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Weather: Clear

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Site Code : 05122326
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Groups Printed- Total Volume

	Gateway Drive Southbound			Gerald Ford Drive Westbound			Gerald Ford Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	29	29	58	104	13	117	10	94	104	279
04:15 PM	25	25	50	80	15	95	11	85	96	241
04:30 PM	26	26	52	96	21	117	8	85	93	262
04:45 PM	22	22	44	88	16	104	11	76	87	235
Total	102	102	204	368	65	433	40	340	380	1017
05:00 PM	22	22	44	79	29	108	11	105	116	268
05:15 PM	13	13	26	74	30	104	8	100	108	238
05:30 PM	23	23	46	74	17	91	12	89	101	238
05:45 PM	25	25	50	64	18	82	10	66	76	208
Total	83	83	166	291	94	385	41	360	401	952
Grand Total	185	185	370	659	159	818	81	700	781	1969
Apprch %	50	50		80.6	19.4		10.4	89.6		
Total %	9.4	9.4	18.8	33.5	8.1	41.5	4.1	35.6	39.7	

	Gateway Drive Southbound			Gerald Ford Drive Westbound			Gerald Ford Drive Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**29**	**29**	**58**	**104**	13	**117**	10	**94**	**104**	**279**
04:15 PM	25	25	50	80	15	95	**11**	85	96	241
04:30 PM	26	26	52	96	**21**	117	8	85	93	262
04:45 PM	22	22	44	88	16	104	11	76	87	235
Total Volume	102	102	204	368	65	433	40	340	380	1017
% App. Total	50	50		85	15		10.5	89.5		
PHF	.879	.879	.879	.885	.774	.925	.909	.904	.913	.911

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City of Palm Desert
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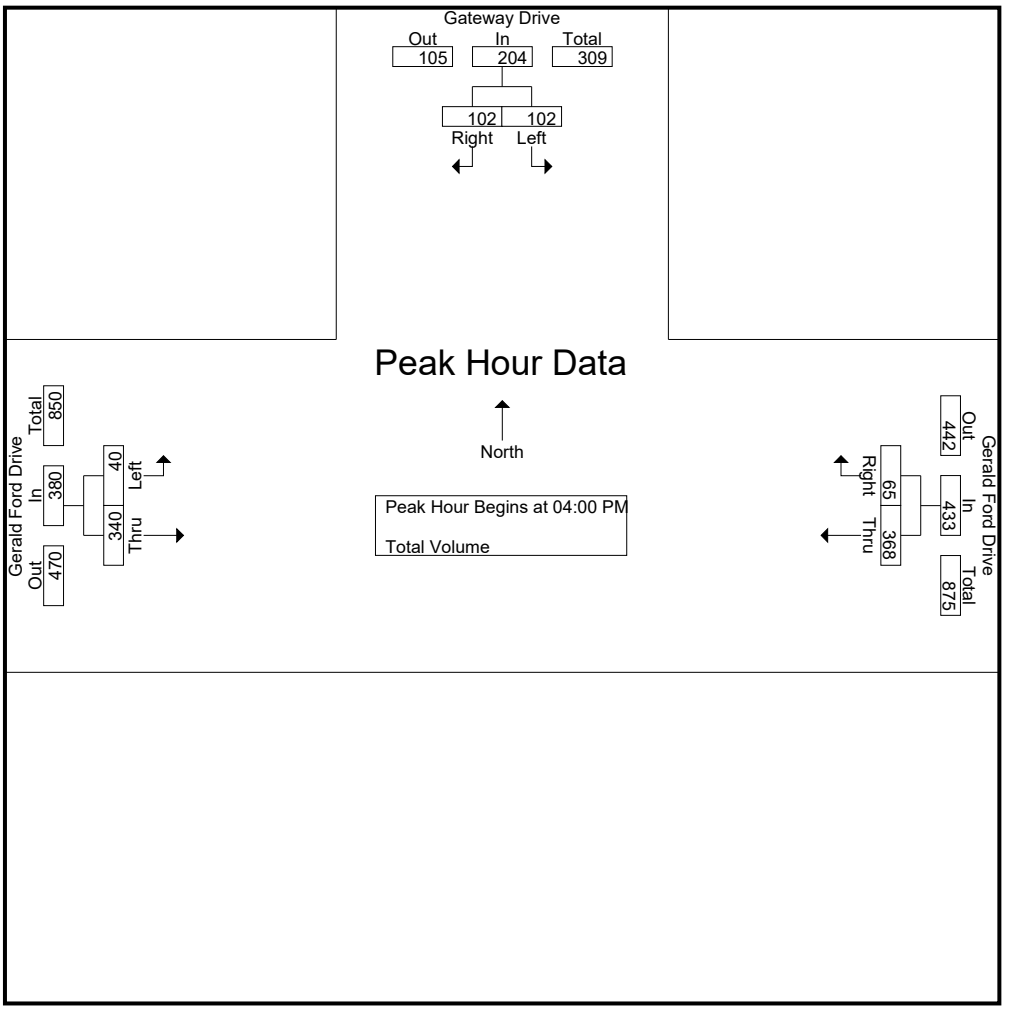
File Name : 02_PLD_Gate_Ger PM
Site Code : 05122326
Start Date : 4/27/2022



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:45 PM		
+0 mins.	**29**	**29**	**58**	**104**	13	**117**	11	76	87
+15 mins.	25	25	50	80	15	95	11	**105**	**116**
+30 mins.	26	26	52	96	**21**	117	8	100	108
+45 mins.	22	22	44	88	16	104	**12**	89	101
Total Volume	102	102	204	368	65	433	42	370	412
% App. Total	50	50		85	15		10.2	89.8	
PHF	.879	.879	.879	.885	.774	.925	.875	.881	.888

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City of Palm Desert
N/S: Rembrandt Parkway/Street A
E/W: Gerald Ford Drive
Weather: Clear

File Name : 03_PLD_Rem_Ger AM
Site Code : 05122326
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Groups Printed- Total Volume

	Rembrandt Parkway Southbound				Gerald Ford Drive Westbound				Street A Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	0	7	13	0	118	5	123	0	0	0	0	0	60	0	60	196
07:15 AM	10	0	6	16	0	115	2	117	0	0	0	0	3	73	0	76	209
07:30 AM	12	0	14	26	0	132	3	135	0	0	0	0	6	84	0	90	251
07:45 AM	19	0	10	29	0	148	7	155	0	0	0	0	1	91	0	92	276
Total	47	0	37	84	0	513	17	530	0	0	0	0	10	308	0	318	932
08:00 AM	4	0	10	14	0	136	10	146	0	0	0	0	6	81	0	87	247
08:15 AM	3	0	12	15	0	92	6	98	0	0	0	0	5	80	0	85	198
08:30 AM	6	0	9	15	0	74	6	80	0	0	0	0	2	88	0	90	185
08:45 AM	6	0	7	13	0	124	3	127	0	0	0	0	5	91	0	96	236
Total	19	0	38	57	0	426	25	451	0	0	0	0	18	340	0	358	866
Grand Total	66	0	75	141	0	939	42	981	0	0	0	0	28	648	0	676	1798
Apprch %	46.8	0	53.2		0	95.7	4.3		0	0	0		4.1	95.9	0		
Total %	3.7	0	4.2	7.8	0	52.2	2.3	54.6	0	0	0	0	1.6	36	0	37.6	

	Rembrandt Parkway Southbound				Gerald Ford Drive Westbound				Street A Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	0	6	16	0	115	2	117	0	0	0	0	3	73	0	76	209
07:30 AM	12	0	**14**	26	0	132	3	135	0	0	0	0	**6**	84	0	90	251
07:45 AM	**19**	0	10	**29**	0	**148**	7	**155**	0	0	0	0	1	**91**	0	**92**	**276**
08:00 AM	4	0	10	14	0	136	**10**	146	0	0	0	0	6	81	0	87	247
Total Volume	45	0	40	85	0	531	22	553	0	0	0	0	16	329	0	345	983
% App. Total	52.9	0	47.1		0	96	4		0	0	0		4.6	95.4	0		
PHF	.592	.000	.714	.733	.000	.897	.550	.892	.000	.000	.000	.000	.667	.904	.000	.938	.890

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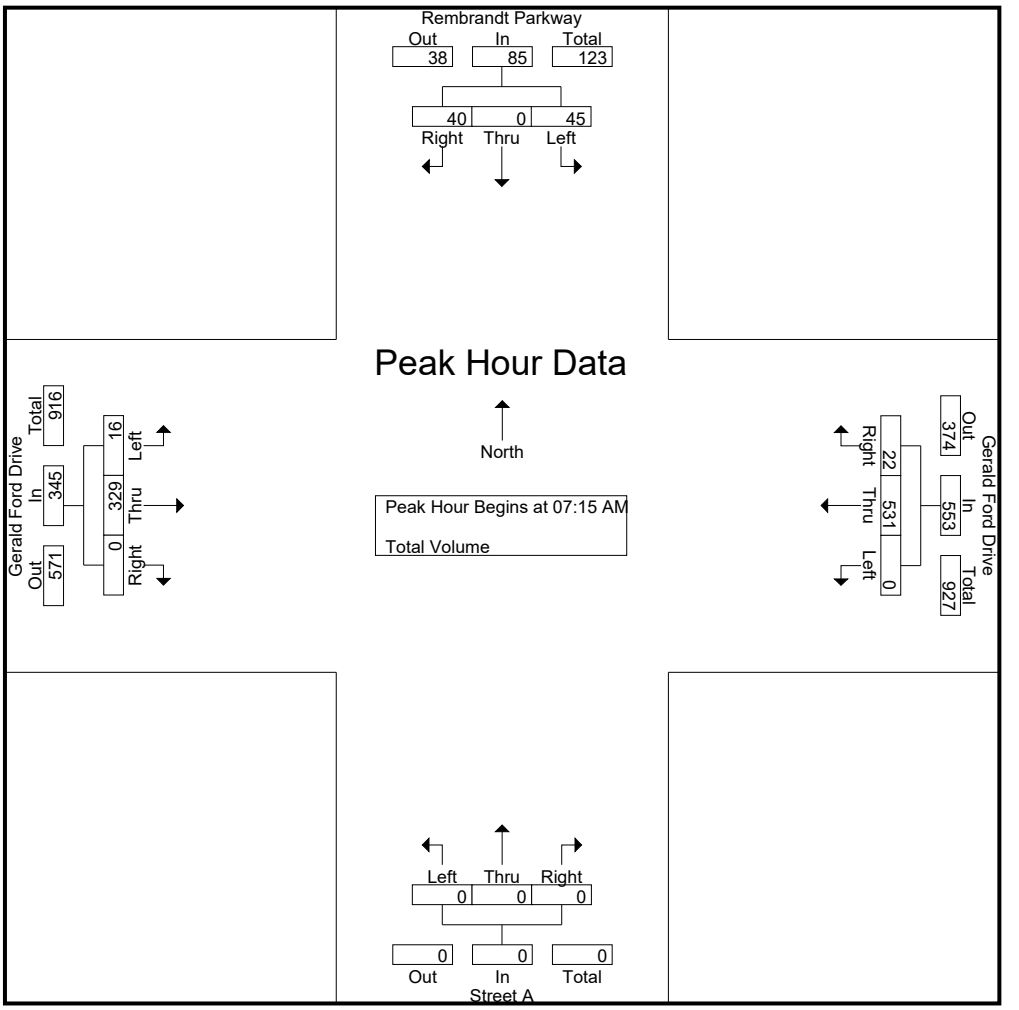

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				08:00 AM			
+0 mins.	10	0	6	16	0	115	2	117	0	0	0	0	**6**	81	0	87
+15 mins.	12	0	**14**	26	0	132	3	135	0	0	0	0	5	80	0	85
+30 mins.	**19**	0	10	**29**	0	**148**	7	**155**	0	0	0	0	2	88	0	90
+45 mins.	4	0	10	14	0	136	**10**	146	0	0	0	0	5	**91**	0	**96**
Total Volume	45	0	40	85	0	531	22	553	0	0	0	0	18	340	0	358
% App. Total	52.9	0	47.1		0	96	4		0	0	0		5	95	0	
PHF	.592	.000	.714	.733	.000	.897	.550	.892	.000	.000	.000	.000	.750	.934	.000	.932

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City of Palm Desert
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Groups Printed- Total Volume

	Rembrandt Parkway Southbound				Gerald Ford Drive Westbound				Street A Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	0	5	7	0	114	14	128	0	0	0	0	11	102	0	113	248
04:15 PM	5	0	5	10	0	94	3	97	0	0	0	0	3	112	0	115	222
04:30 PM	3	0	4	7	0	98	13	111	0	0	0	0	12	103	0	115	233
04:45 PM	2	0	6	8	0	94	6	100	0	0	0	0	5	103	0	108	216
Total	12	0	20	32	0	400	36	436	0	0	0	0	31	420	0	451	919
05:00 PM	9	0	7	16	0	88	10	98	0	0	0	0	9	123	0	132	246
05:15 PM	4	0	5	9	0	97	8	105	0	0	0	0	11	112	0	123	237
05:30 PM	7	0	5	12	0	81	9	90	0	0	0	0	5	115	0	120	222
05:45 PM	2	0	4	6	0	78	8	86	0	0	0	0	8	94	0	102	194
Total	22	0	21	43	0	344	35	379	0	0	0	0	33	444	0	477	899
Grand Total	34	0	41	75	0	744	71	815	0	0	0	0	64	864	0	928	1818
Apprch %	45.3	0	54.7		0	91.3	8.7		0	0	0		6.9	93.1	0		
Total %	1.9	0	2.3	4.1	0	40.9	3.9	44.8	0	0	0	0	3.5	47.5	0	51	

	Rembrandt Parkway Southbound				Gerald Ford Drive Westbound				Street A Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	3	0	4	7	0	**98**	**13**	**111**	0	0	0	0	**12**	103	0	115	233
04:45 PM	2	0	6	8	0	94	6	100	0	0	0	0	5	103	0	108	216
05:00 PM	**9**	0	**7**	**16**	0	88	10	98	0	0	0	0	9	**123**	0	**132**	**246**
05:15 PM	4	0	5	9	0	97	8	105	0	0	0	0	11	112	0	123	237
Total Volume	18	0	22	40	0	377	37	414	0	0	0	0	37	441	0	478	932
% App. Total	45	0	55		0	91.1	8.9		0	0	0		7.7	92.3	0		
PHF	.500	.000	.786	.625	.000	.962	.712	.932	.000	.000	.000	.000	.771	.896	.000	.905	.947

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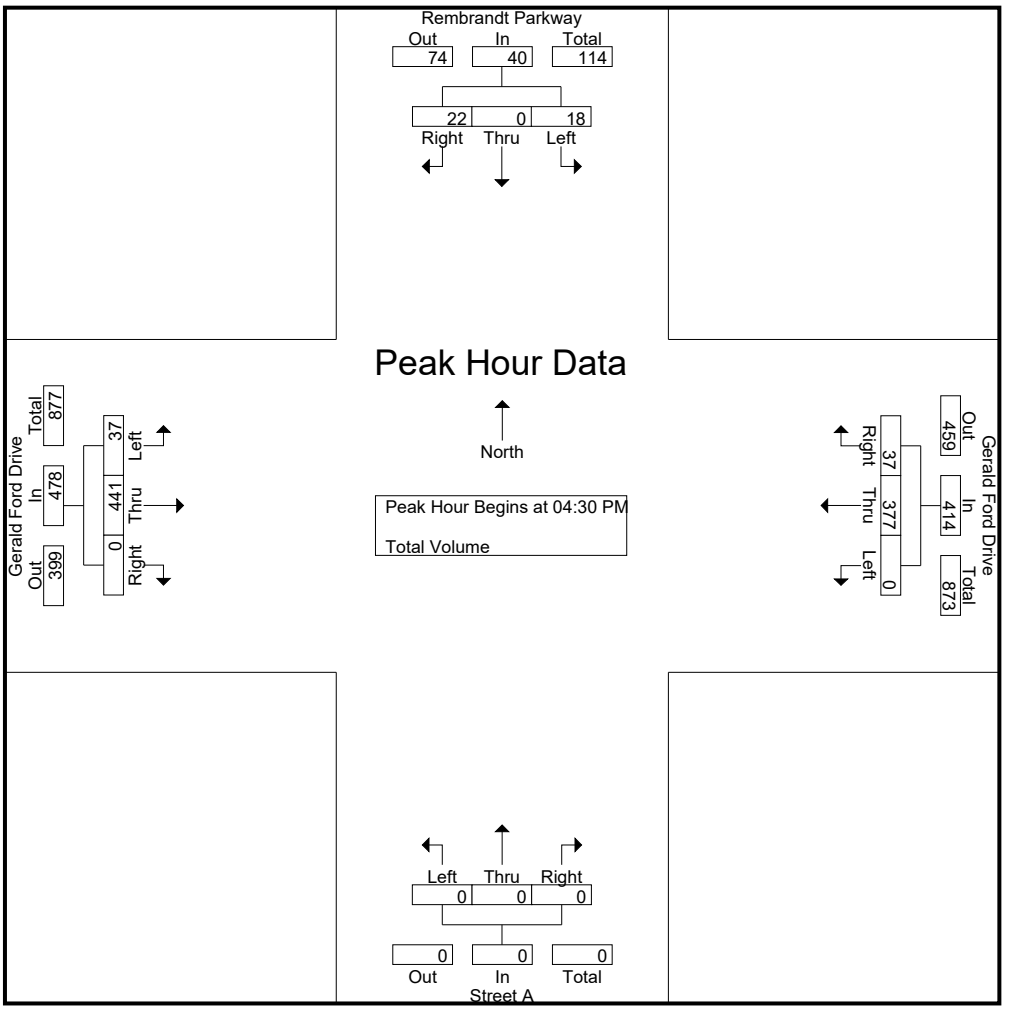
City of Palm Desert
N/S: Rembrandt Parkway/Street A
E/W: Gerald Ford Drive
Weather: Clear

File Name : 03_PLD_Rem_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				04:00 PM				04:45 PM			
+0 mins.	2	0	6	8	0	**114**	**14**	**128**	0	0	0	0	5	103	0	108
+15 mins.	**9**	0	**7**	**16**	0	94	3	97	0	0	0	0	9	**123**	0	**132**
+30 mins.	4	0	5	9	0	98	13	111	0	0	0	0	**11**	112	0	123
+45 mins.	7	0	5	12	0	94	6	100	0	0	0	0	5	115	0	120
Total Volume	22	0	23	45	0	400	36	436	0	0	0	0	30	453	0	483
% App. Total	48.9	0	51.1		0	91.7	8.3		0	0	0		6.2	93.8	0	
PHF	.611	.000	.821	.703	.000	.877	.643	.852	.000	.000	.000	.000	.682	.921	.000	.915

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City of Palm Desert
N/S: Portola Road
E/W: Gerald Ford Drive
Weather: Clear

File Name : 04_PLD_Por_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Gerald Ford Drive Westbound				Portola Road Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	33	2	50	9	91	25	125	22	31	2	55	1	47	22	70	300
07:15 AM	17	53	0	70	6	101	38	145	11	39	5	55	0	48	30	78	348
07:30 AM	13	55	1	69	13	112	38	163	23	60	7	90	4	54	51	109	431
07:45 AM	28	62	0	90	7	132	54	193	25	74	14	113	0	57	46	103	499
Total	73	203	3	279	35	436	155	626	81	204	28	313	5	206	149	360	1578
08:00 AM	17	45	1	63	7	116	31	154	39	55	13	107	2	68	27	97	421
08:15 AM	11	45	1	57	9	60	39	108	29	74	6	109	0	40	29	69	343
08:30 AM	15	46	3	64	4	78	42	124	15	48	8	71	0	67	36	103	362
08:45 AM	20	53	1	74	3	87	30	120	33	53	9	95	3	63	36	102	391
Total	63	189	6	258	23	341	142	506	116	230	36	382	5	238	128	371	1517
Grand Total	136	392	9	537	58	777	297	1132	197	434	64	695	10	444	277	731	3095
Apprch %	25.3	73	1.7		5.1	68.6	26.2		28.3	62.4	9.2		1.4	60.7	37.9		
Total %	4.4	12.7	0.3	17.4	1.9	25.1	9.6	36.6	6.4	14	2.1	22.5	0.3	14.3	8.9	23.6	

	Portola Road Southbound				Gerald Ford Drive Westbound				Portola Road Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	53	0	70	6	101	38	145	11	39	5	55	0	48	30	78	348
07:30 AM	13	55	**1**	69	**13**	112	38	163	23	60	7	90	**4**	54	**51**	**109**	431
07:45 AM	**28**	**62**	0	**90**	7	**132**	**54**	**193**	25	**74**	**14**	**113**	0	57	46	103	**499**
08:00 AM	17	45	1	63	7	116	31	154	**39**	55	13	107	2	**68**	27	97	421
Total Volume	75	215	2	292	33	461	161	655	98	228	39	365	6	227	154	387	1699
% App. Total	25.7	73.6	0.7		5	70.4	24.6		26.8	62.5	10.7		1.6	58.7	39.8		
PHF	.670	.867	.500	.811	.635	.873	.745	.848	.628	.770	.696	.808	.375	.835	.755	.888	.851

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City of Palm Desert
N/S: Portola Road
E/W: Gerald Ford Drive
Weather: Clear

File Name : 04_PLD_Por_Ger AM
Site Code : 05122326
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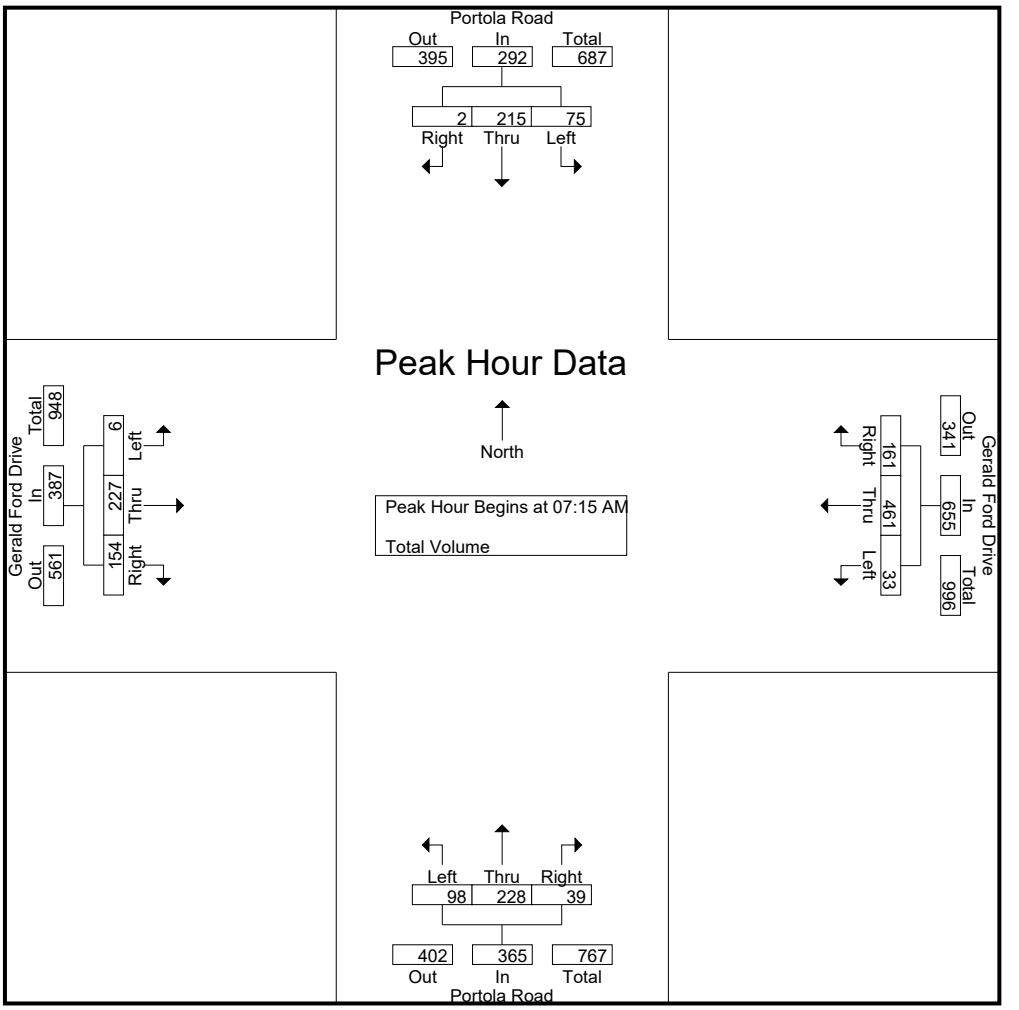

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	17	53	0	70	6	101	38	145	23	60	7	90	0	48	30	78
+15 mins.	13	55	**1**	69	**13**	112	38	163	25	**74**	**14**	**113**	**4**	54	**51**	**109**
+30 mins.	**28**	**62**	0	**90**	7	**132**	**54**	**193**	**39**	55	13	107	0	57	46	103
+45 mins.	17	45	1	63	7	116	31	154	29	74	6	109	2	**68**	27	97
Total Volume	75	215	2	292	33	461	161	655	116	263	40	419	6	227	154	387
% App. Total	25.7	73.6	0.7		5	70.4	24.6		27.7	62.8	9.5		1.6	58.7	39.8	
PHF	.670	.867	.500	.811	.635	.873	.745	.848	.744	.889	.714	.927	.375	.835	.755	.888

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City of Palm Desert
N/S: Portola Road
E/W: Gerald Ford Drive
Weather: Clear

File Name : 04_PLD_Por_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Gerald Ford Drive Westbound				Portola Road Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	33	71	1	105	7	86	31	124	40	74	13	127	1	77	24	102	458
04:15 PM	31	53	2	86	13	62	29	104	32	67	19	118	0	82	28	110	418
04:30 PM	38	51	2	91	1	80	30	111	24	69	15	108	3	79	33	115	425
04:45 PM	36	52	4	92	12	70	25	107	25	72	4	101	0	60	29	89	389
Total	138	227	9	374	33	298	115	446	121	282	51	454	4	298	114	416	1690
05:00 PM	35	42	0	77	10	63	25	98	28	66	9	103	1	99	33	133	411
05:15 PM	23	49	1	73	7	74	18	99	32	76	8	116	2	91	26	119	407
05:30 PM	36	57	0	93	8	59	21	88	33	57	6	96	2	96	22	120	397
05:45 PM	21	43	0	64	12	60	22	94	25	40	14	79	1	69	30	100	337
Total	115	191	1	307	37	256	86	379	118	239	37	394	6	355	111	472	1552
Grand Total	253	418	10	681	70	554	201	825	239	521	88	848	10	653	225	888	3242
Apprch %	37.2	61.4	1.5		8.5	67.2	24.4		28.2	61.4	10.4		1.1	73.5	25.3		
Total %	7.8	12.9	0.3	21	2.2	17.1	6.2	25.4	7.4	16.1	2.7	26.2	0.3	20.1	6.9	27.4	

	Portola Road Southbound				Gerald Ford Drive Westbound				Portola Road Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	33	**71**	1	**105**	7	**86**	**31**	**124**	**40**	**74**	13	**127**	1	77	24	102	**458**
04:15 PM	31	53	2	86	**13**	62	29	104	32	67	**19**	118	0	**82**	28	110	418
04:30 PM	**38**	51	2	91	1	80	30	111	24	69	15	108	**3**	79	**33**	**115**	425
04:45 PM	36	52	**4**	92	12	70	25	107	25	72	4	101	0	60	29	89	389
Total Volume	138	227	9	374	33	298	115	446	121	282	51	454	4	298	114	416	1690
% App. Total	36.9	60.7	2.4		7.4	66.8	25.8		26.7	62.1	11.2		1	71.6	27.4		
PHF	.908	.799	.563	.890	.635	.866	.927	.899	.756	.953	.671	.894	.333	.909	.864	.904	.922

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City of Palm Desert
N/S: Portola Road
E/W: Gerald Ford Drive
Weather: Clear

File Name : 04_PLD_Por_Ger PM
Site Code : 05122326
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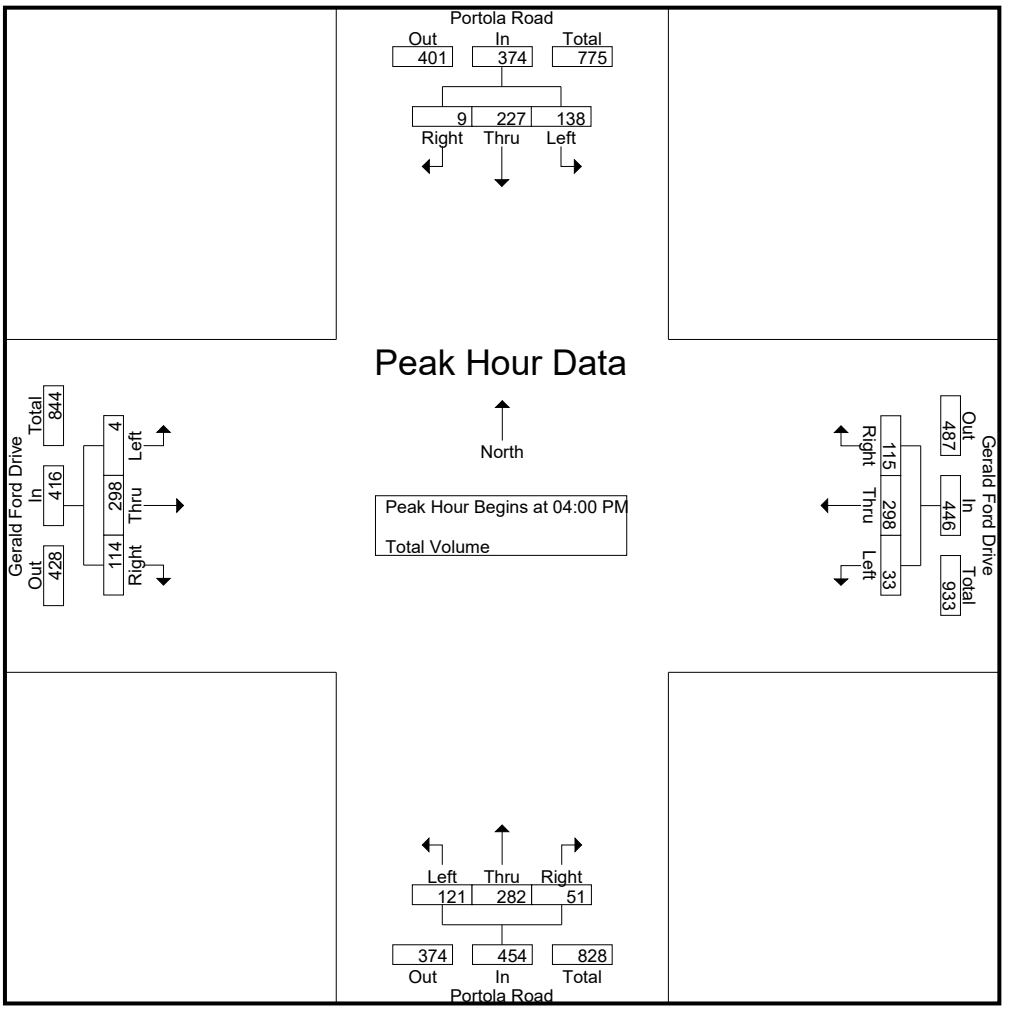

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	33	**71**	1	**105**	7	**86**	**31**	**124**	**40**	**74**	13	**127**	1	**99**	**33**	**133**
+15 mins.	31	53	2	86	**13**	62	29	104	32	67	**19**	118	**2**	91	26	119
+30 mins.	**38**	51	2	91	1	80	30	111	24	69	15	108	2	96	22	120
+45 mins.	36	52	**4**	92	12	70	25	107	25	72	4	101	1	69	30	100
Total Volume	138	227	9	374	33	298	115	446	121	282	51	454	6	355	111	472
% App. Total	36.9	60.7	2.4		7.4	66.8	25.8		26.7	62.1	11.2		1.3	75.2	23.5	
PHF	.908	.799	.563	.890	.635	.866	.927	.899	.756	.953	.671	.894	.750	.896	.841	.887

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City of Palm Desert
N/S: Dinah Shore/Pacific Avenue
E/W: Gerald Ford Drive
Weather: Clear

File Name : 05_PLD_Pac_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Dinah Shore Drive Southbound				Gerald Ford Drive Westbound				Pacific Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	2	1	8	11	121	5	137	3	1	3	7	0	56	10	66	218
07:15 AM	6	2	3	11	5	146	8	159	2	2	1	5	0	63	1	64	239
07:30 AM	6	1	5	12	1	156	1	158	1	0	0	1	0	80	1	81	252
07:45 AM	18	0	5	23	3	188	6	197	0	0	2	2	0	99	1	100	322
Total	35	5	14	54	20	611	20	651	6	3	6	15	0	298	13	311	1031
08:00 AM	6	0	2	8	1	140	6	147	2	4	0	6	0	93	2	95	256
08:15 AM	5	0	0	5	1	113	6	120	0	2	0	2	0	55	2	57	184
08:30 AM	16	2	3	21	3	114	9	126	1	2	1	4	0	89	2	91	242
08:45 AM	13	1	3	17	0	118	5	123	3	1	1	5	1	89	0	90	235
Total	40	3	8	51	5	485	26	516	6	9	2	17	1	326	6	333	917
Grand Total	75	8	22	105	25	1096	46	1167	12	12	8	32	1	624	19	644	1948
Apprch %	71.4	7.6	21		2.1	93.9	3.9		37.5	37.5	25		0.2	96.9	3		
Total %	3.9	0.4	1.1	5.4	1.3	56.3	2.4	59.9	0.6	0.6	0.4	1.6	0.1	32	1	33.1	

	Dinah Shore Drive Southbound				Gerald Ford Drive Westbound				Pacific Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	6	**2**	3	11	**5**	146	**8**	159	**2**	2	1	5	0	63	1	64	239
07:30 AM	6	1	**5**	12	1	156	1	158	1	0	0	1	0	80	1	81	252
07:45 AM	**18**	0	5	**23**	3	**188**	6	**197**	0	0	**2**	2	0	**99**	1	**100**	**322**
08:00 AM	6	0	2	8	1	140	6	147	2	**4**	0	**6**	0	93	**2**	95	256
Total Volume	36	3	15	54	10	630	21	661	5	6	3	14	0	335	5	340	1069
% App. Total	66.7	5.6	27.8		1.5	95.3	3.2		35.7	42.9	21.4		0	98.5	1.5		
PHF	.500	.375	.750	.587	.500	.838	.656	.839	.625	.375	.375	.583	.000	.846	.625	.850	.830

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City of Palm Desert
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E/W: Gerald Ford Drive
Weather: Clear

File Name : 05_PLD_Pac_Ger AM
Site Code : 05122326
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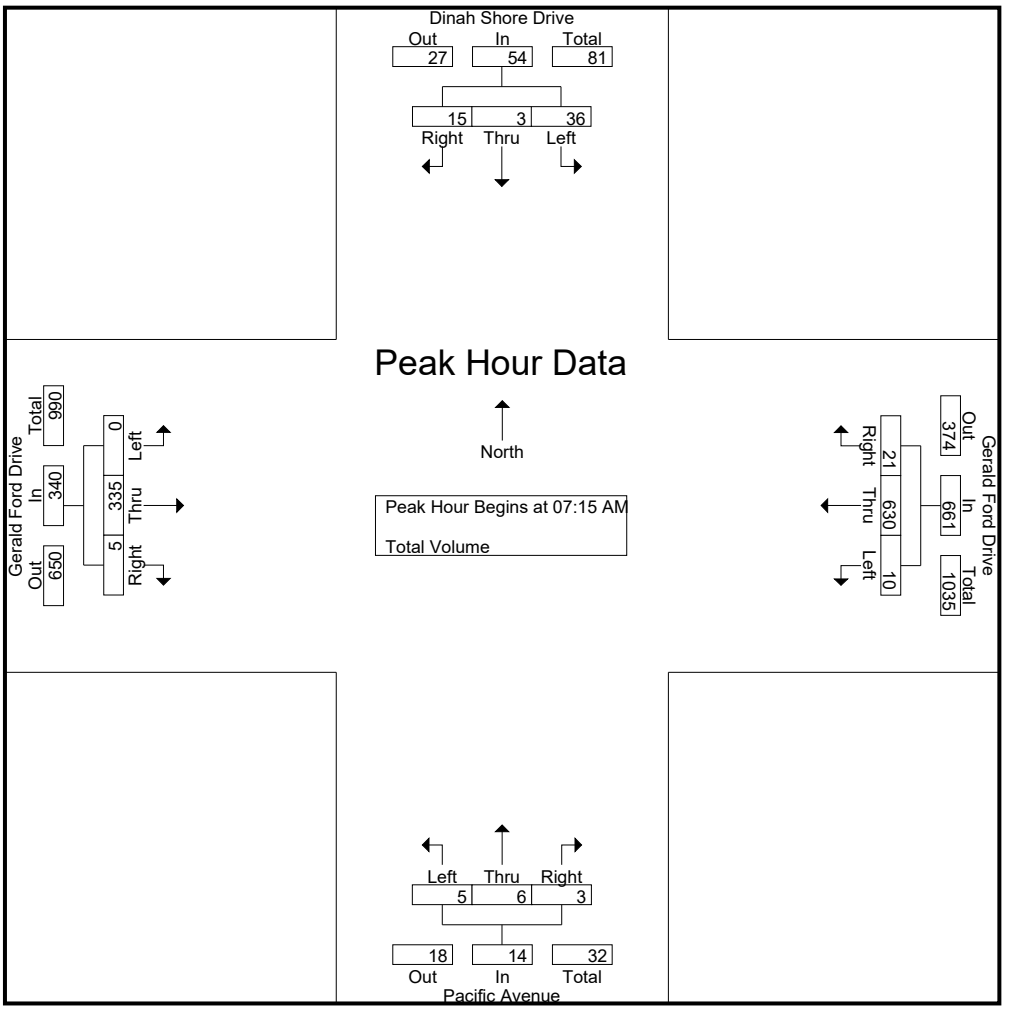

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:15 AM				08:00 AM				07:45 AM			
+0 mins.	**18**	0	**5**	**23**	**5**	146	**8**	159	2	**4**	0	**6**	0	**99**	1	**100**
+15 mins.	6	0	2	8	1	156	1	158	0	2	0	2	0	93	**2**	95
+30 mins.	5	0	0	5	3	**188**	6	**197**	1	2	**1**	4	0	55	2	57
+45 mins.	16	**2**	3	21	1	140	6	147	**3**	1	1	5	0	89	2	91
Total Volume	45	2	10	57	10	630	21	661	6	9	2	17	0	336	7	343
% App. Total	78.9	3.5	17.5		1.5	95.3	3.2		35.3	52.9	11.8		0	98	2	
PHF	.625	.250	.500	.620	.500	.838	.656	.839	.500	.563	.500	.708	.000	.848	.875	.858

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City of Palm Desert
N/S: Dinah Shore/Pacific Avenue
E/W: Gerald Ford Drive
Weather: Clear

File Name : 05_PLD_Pac_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Dinah Shore Drive Southbound				Gerald Ford Drive Westbound				Pacific Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	23	2	0	25	1	117	10	128	2	1	1	4	2	135	1	138	295
04:15 PM	12	1	1	14	1	104	13	118	2	0	0	2	4	119	1	124	258
04:30 PM	13	0	2	15	0	112	13	125	0	1	1	2	1	133	0	134	276
04:45 PM	11	1	1	13	1	109	8	118	2	1	0	3	2	103	1	106	240
Total	59	4	4	67	3	442	44	489	6	3	2	11	9	490	3	502	1069
05:00 PM	23	0	1	24	0	96	6	102	3	1	1	5	1	138	2	141	272
05:15 PM	12	1	1	14	0	103	9	112	3	0	2	5	4	119	1	124	255
05:30 PM	8	1	1	10	0	92	11	103	0	1	1	2	1	131	0	132	247
05:45 PM	16	0	0	16	0	84	4	88	1	2	2	5	4	105	1	110	219
Total	59	2	3	64	0	375	30	405	7	4	6	17	10	493	4	507	993
Grand Total	118	6	7	131	3	817	74	894	13	7	8	28	19	983	7	1009	2062
Apprch %	90.1	4.6	5.3		0.3	91.4	8.3		46.4	25	28.6		1.9	97.4	0.7		
Total %	5.7	0.3	0.3	6.4	0.1	39.6	3.6	43.4	0.6	0.3	0.4	1.4	0.9	47.7	0.3	48.9	

	Dinah Shore Drive Southbound				Gerald Ford Drive Westbound				Pacific Avenue Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**23**	**2**	0	**25**	**1**	**117**	10	**128**	**2**	**1**	**1**	**4**	2	**135**	**1**	**138**	**295**
04:15 PM	12	1	1	14	1	104	**13**	118	2	0	0	2	**4**	119	1	124	258
04:30 PM	13	0	**2**	15	0	112	13	125	0	1	1	2	1	133	0	134	276
04:45 PM	11	1	1	13	1	109	8	118	2	1	0	3	2	103	1	106	240
Total Volume	59	4	4	67	3	442	44	489	6	3	2	11	9	490	3	502	1069
% App. Total	88.1	6	6		0.6	90.4	9		54.5	27.3	18.2		1.8	97.6	0.6		
PHF	.641	.500	.500	.670	.750	.944	.846	.955	.750	.750	.500	.688	.563	.907	.750	.909	.906

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City of Palm Desert
N/S: Dinah Shore/Pacific Avenue
E/W: Gerald Ford Drive
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File Name : 05_PLD_Pac_Ger PM
Site Code : 05122326
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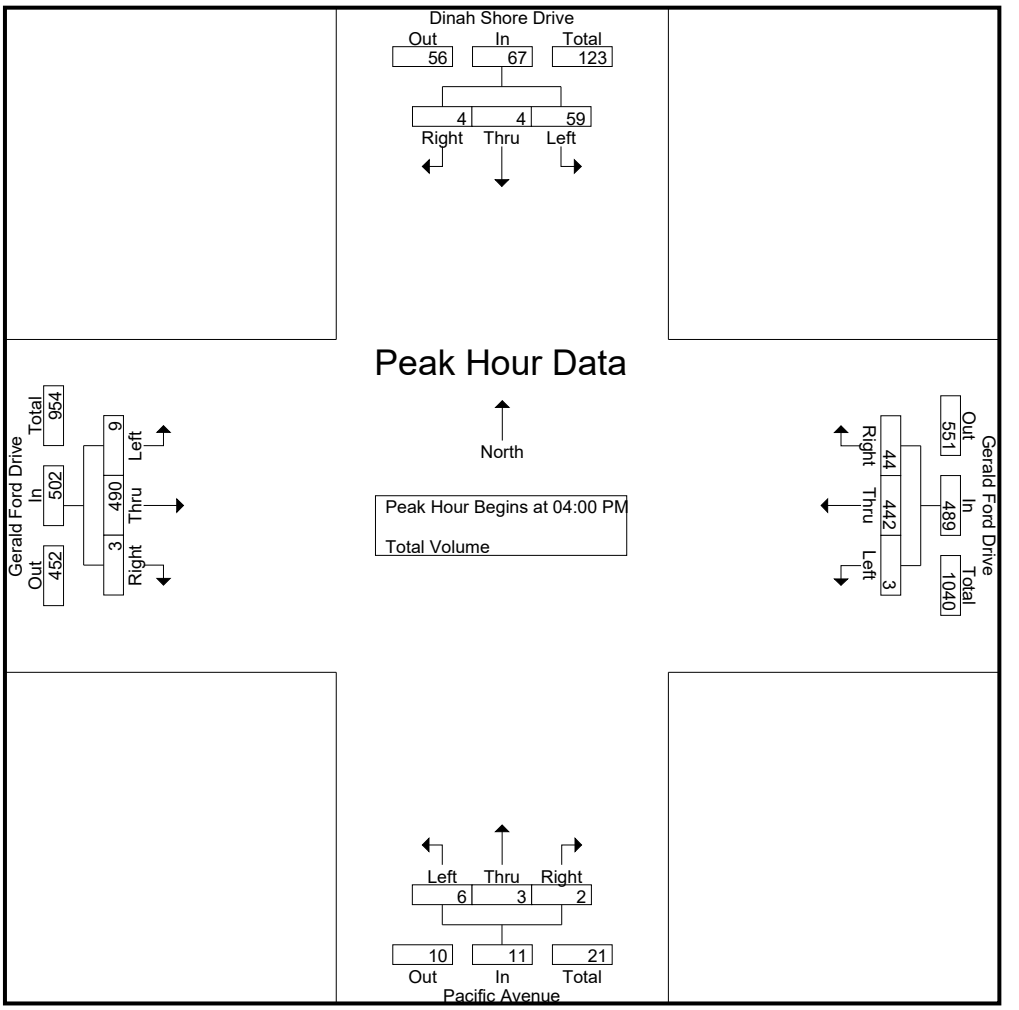

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	**23**	**2**	0	**25**	**1**	**117**	10	**128**	**3**	1	1	**5**	1	**138**	**2**	**141**
+15 mins.	12	1	1	14	1	104	**13**	118	3	0	**2**	5	**4**	119	1	124
+30 mins.	13	0	**2**	15	0	112	13	125	0	1	1	2	1	131	0	132
+45 mins.	11	1	1	13	1	109	8	118	1	**2**	2	5	4	105	1	110
Total Volume	59	4	4	67	3	442	44	489	7	4	6	17	10	493	4	507
% App. Total	88.1	6	6		0.6	90.4	9		41.2	23.5	35.3		2	97.2	0.8	
PHF	.641	.500	.500	.670	.750	.944	.846	.955	.583	.500	.750	.850	.625	.893	.500	.899

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City of Palm Desert
N/S: Technology Drive
E/W: Gerald Ford Drive
Weather: Clear

File Name : 06_PLD_Tech_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Technology Drive Southbound				Gerald Ford Drive Westbound				Technology Drive Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	2	6	23	2	123	7	132	3	6	6	15	3	52	6	61	231
07:15 AM	11	2	9	22	2	140	7	149	6	3	3	12	2	62	7	71	254
07:30 AM	12	2	7	21	2	164	8	174	1	8	7	16	9	67	4	80	291
07:45 AM	17	4	8	29	6	174	13	193	5	6	4	15	7	106	10	123	360
Total	55	10	30	95	12	601	35	648	15	23	20	58	21	287	27	335	1136
08:00 AM	20	9	8	37	4	131	14	149	4	5	5	14	13	68	6	87	287
08:15 AM	12	0	8	20	3	108	7	118	2	4	6	12	5	53	5	63	213
08:30 AM	11	3	6	20	0	122	11	133	4	9	4	17	4	87	3	94	264
08:45 AM	14	2	4	20	7	110	14	131	3	4	10	17	13	82	6	101	269
Total	57	14	26	97	14	471	46	531	13	22	25	60	35	290	20	345	1033
Grand Total	112	24	56	192	26	1072	81	1179	28	45	45	118	56	577	47	680	2169
Apprch %	58.3	12.5	29.2		2.2	90.9	6.9		23.7	38.1	38.1		8.2	84.9	6.9		
Total %	5.2	1.1	2.6	8.9	1.2	49.4	3.7	54.4	1.3	2.1	2.1	5.4	2.6	26.6	2.2	31.4	

	Technology Drive Southbound				Gerald Ford Drive Westbound				Technology Drive Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	11	2	**9**	22	2	140	7	149	**6**	3	3	12	2	62	7	71	254
07:30 AM	12	2	7	21	2	164	8	174	1	**8**	**7**	**16**	9	67	4	80	291
07:45 AM	17	4	8	29	**6**	**174**	13	**193**	5	6	4	15	7	**106**	**10**	**123**	**360**
08:00 AM	**20**	**9**	8	**37**	4	131	**14**	149	4	5	5	14	**13**	68	6	87	287
Total Volume	60	17	32	109	14	609	42	665	16	22	19	57	31	303	27	361	1192
% App. Total	55	15.6	29.4		2.1	91.6	6.3		28.1	38.6	33.3		8.6	83.9	7.5		
PHF	.750	.472	.889	.736	.583	.875	.750	.861	.667	.688	.679	.891	.596	.715	.675	.734	.828

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City of Palm Desert
N/S: Technology Drive
E/W: Gerald Ford Drive
Weather: Clear

File Name : 06_PLD_Tech_Ger AM
Site Code : 05122326
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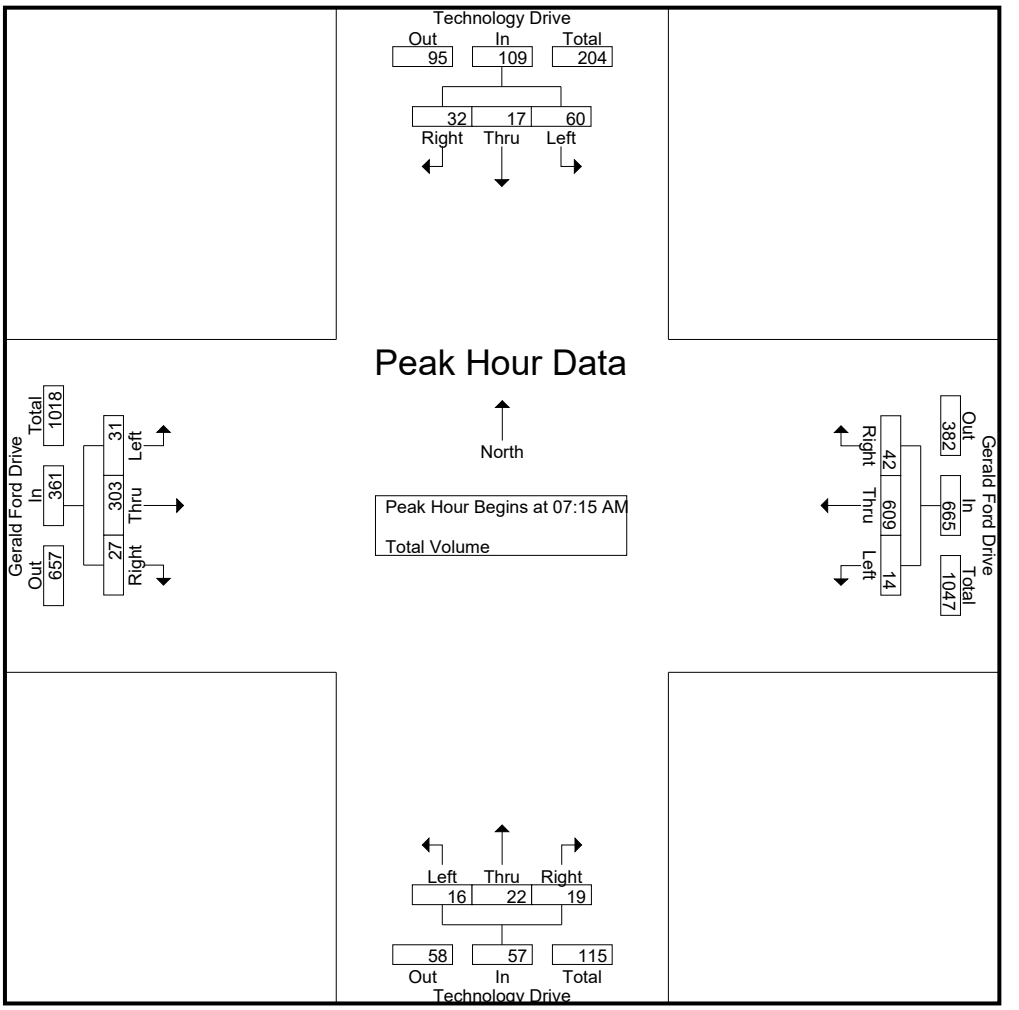
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				08:00 AM				07:45 AM			
+0 mins.	11	2	**9**	22	2	140	7	149	**4**	5	5	14	7	**106**	**10**	**123**
+15 mins.	12	2	7	21	2	164	8	174	2	4	6	12	**13**	68	6	87
+30 mins.	17	4	8	29	**6**	**174**	13	**193**	4	**9**	4	**17**	5	53	5	63
+45 mins.	**20**	**9**	8	**37**	4	131	**14**	149	3	4	**10**	17	4	87	3	94
Total Volume	60	17	32	109	14	609	42	665	13	22	25	60	29	314	24	367
% App. Total	55	15.6	29.4		2.1	91.6	6.3		21.7	36.7	41.7		7.9	85.6	6.5	
PHF	.750	.472	.889	.736	.583	.875	.750	.861	.813	.611	.625	.882	.558	.741	.600	.746

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City of Palm Desert
N/S: Technology Drive
E/W: Gerald Ford Drive
Weather: Clear

File Name : 06_PLD_Tech_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Technology Drive Southbound				Gerald Ford Drive Westbound				Technology Drive Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	9	5	12	26	1	104	14	119	15	5	1	21	11	157	3	171	337
04:15 PM	18	4	9	31	2	103	14	119	6	3	7	16	14	112	3	129	295
04:30 PM	24	3	11	38	1	105	7	113	8	3	15	26	9	140	4	153	330
04:45 PM	18	0	14	32	2	93	2	97	17	4	13	34	3	101	1	105	268
Total	69	12	46	127	6	405	37	448	46	15	36	97	37	510	11	558	1230
05:00 PM	20	3	8	31	4	73	4	81	14	0	13	27	3	157	4	164	303
05:15 PM	10	4	2	16	1	103	16	120	10	4	9	23	10	131	4	145	304
05:30 PM	12	0	5	17	0	87	15	102	10	3	4	17	6	132	3	141	277
05:45 PM	5	2	3	10	1	77	16	94	10	4	1	15	12	109	3	124	243
Total	47	9	18	74	6	340	51	397	44	11	27	82	31	529	14	574	1127
Grand Total	116	21	64	201	12	745	88	845	90	26	63	179	68	1039	25	1132	2357
Apprch %	57.7	10.4	31.8		1.4	88.2	10.4		50.3	14.5	35.2		6	91.8	2.2		
Total %	4.9	0.9	2.7	8.5	0.5	31.6	3.7	35.9	3.8	1.1	2.7	7.6	2.9	44.1	1.1	48	

	Technology Drive Southbound				Gerald Ford Drive Westbound				Technology Drive Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	9	**5**	12	26	1	104	**14**	**119**	15	**5**	1	21	11	**157**	3	**171**	**337**
04:15 PM	18	4	9	31	**2**	103	14	119	6	3	7	16	**14**	112	3	129	295
04:30 PM	**24**	3	11	**38**	1	**105**	7	113	8	3	**15**	26	9	140	**4**	153	330
04:45 PM	18	0	**14**	32	2	93	2	97	**17**	4	13	**34**	3	101	1	105	268
Total Volume	69	12	46	127	6	405	37	448	46	15	36	97	37	510	11	558	1230
% App. Total	54.3	9.4	36.2		1.3	90.4	8.3		47.4	15.5	37.1		6.6	91.4	2		
PHF	.719	.600	.821	.836	.750	.964	.661	.941	.676	.750	.600	.713	.661	.812	.688	.816	.912

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City of Palm Desert
N/S: Technology Drive
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Weather: Clear

File Name : 06_PLD_Tech_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
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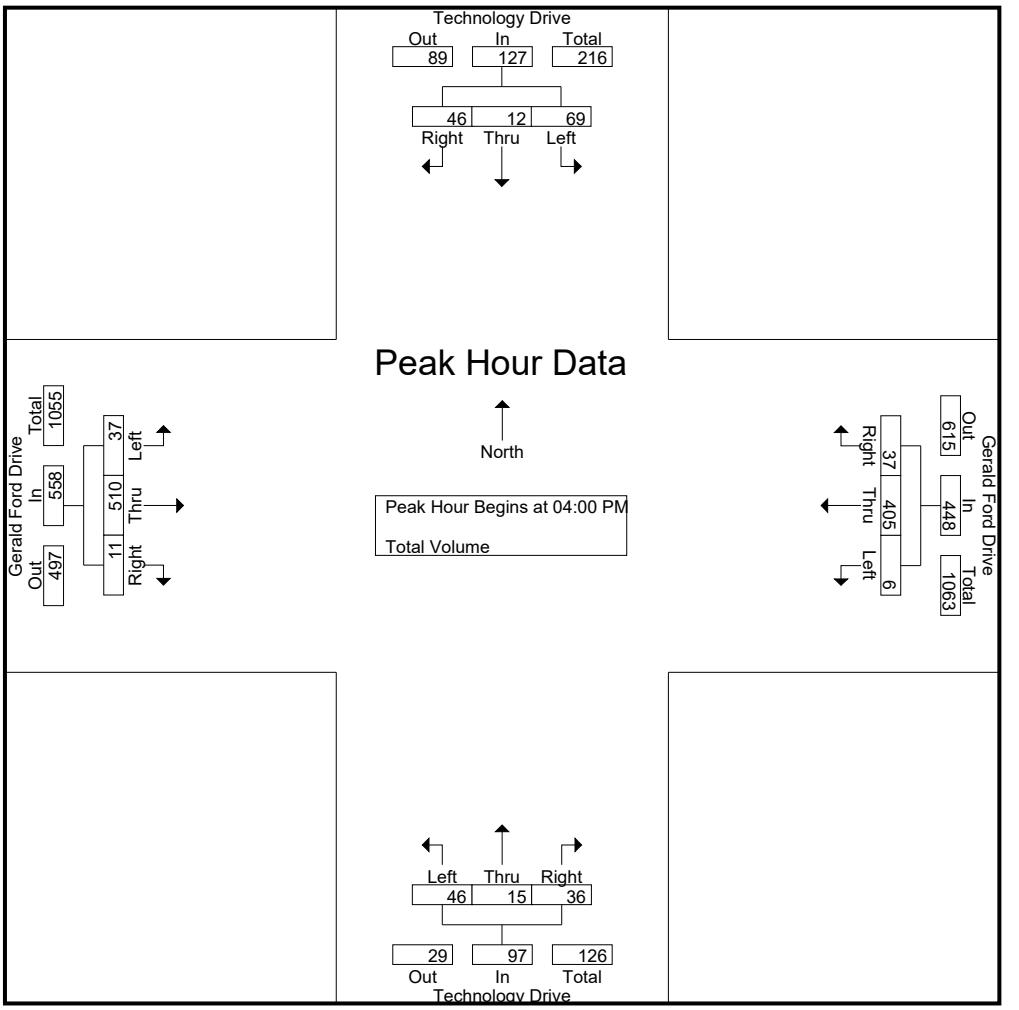

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	18	**4**	9	31	1	104	**14**	**119**	8	3	**15**	26	3	**157**	**4**	**164**
+15 mins.	**24**	3	11	**38**	**2**	103	14	119	**17**	**4**	13	**34**	10	131	4	145
+30 mins.	18	0	**14**	32	1	**105**	7	113	14	0	13	27	6	132	3	141
+45 mins.	20	3	8	31	2	93	2	97	10	4	9	23	**12**	109	3	124
Total Volume	80	10	42	132	6	405	37	448	49	11	50	110	31	529	14	574
% App. Total	60.6	7.6	31.8		1.3	90.4	8.3		44.5	10	45.5		5.4	92.2	2.4	
PHF	.833	.625	.750	.868	.750	.964	.661	.941	.721	.688	.833	.809	.646	.842	.875	.875

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City of Palm Desert
N/S: Cook Street
E/W: Gerald Ford Drive
Weather: Clear

File Name : 07_PLD_Cook_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Cook Street Southbound				Gerald Ford Drive Westbound				Cook Street Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	217	87	331	6	41	18	65	24	106	5	135	47	26	14	87	618
07:15 AM	36	286	85	407	2	53	30	85	28	85	7	120	32	23	17	72	684
07:30 AM	26	371	104	501	7	50	22	79	23	111	5	139	53	26	17	96	815
07:45 AM	60	373	111	544	9	74	30	113	33	132	12	177	73	28	32	133	967
Total	149	1247	387	1783	24	218	100	342	108	434	29	571	205	103	80	388	3084
08:00 AM	34	275	75	384	6	58	29	93	35	123	3	161	53	24	25	102	740
08:15 AM	46	279	56	381	7	40	33	80	24	129	8	161	47	21	19	87	709
08:30 AM	33	238	57	328	5	60	26	91	45	186	6	237	62	32	20	114	770
08:45 AM	43	274	68	385	11	50	28	89	36	136	8	180	59	28	31	118	772
Total	156	1066	256	1478	29	208	116	353	140	574	25	739	221	105	95	421	2991
Grand Total	305	2313	643	3261	53	426	216	695	248	1008	54	1310	426	208	175	809	6075
Apprch %	9.4	70.9	19.7		7.6	61.3	31.1		18.9	76.9	4.1		52.7	25.7	21.6		
Total %	5	38.1	10.6	53.7	0.9	7	3.6	11.4	4.1	16.6	0.9	21.6	7	3.4	2.9	13.3	

	Cook Street Southbound				Gerald Ford Drive Westbound				Cook Street Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	26	371	104	501	7	50	22	79	23	111	5	139	53	26	17	96	815
07:45 AM	**60**	**373**	**111**	**544**	**9**	**74**	30	**113**	33	**132**	**12**	**177**	**73**	**28**	**32**	**133**	**967**
08:00 AM	34	275	75	384	6	58	29	93	**35**	123	3	161	53	24	25	102	740
08:15 AM	46	279	56	381	7	40	**33**	80	24	129	8	161	47	21	19	87	709
Total Volume	166	1298	346	1810	29	222	114	365	115	495	28	638	226	99	93	418	3231
% App. Total	9.2	71.7	19.1		7.9	60.8	31.2		18	77.6	4.4		54.1	23.7	22.2		
PHF	.692	.870	.779	.832	.806	.750	.864	.808	.821	.938	.583	.901	.774	.884	.727	.786	.835

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City of Palm Desert
N/S: Cook Street
E/W: Gerald Ford Drive
Weather: Clear

File Name : 07_PLD_Cook_Ger AM
Site Code : 05122326
Start Date : 4/27/2022
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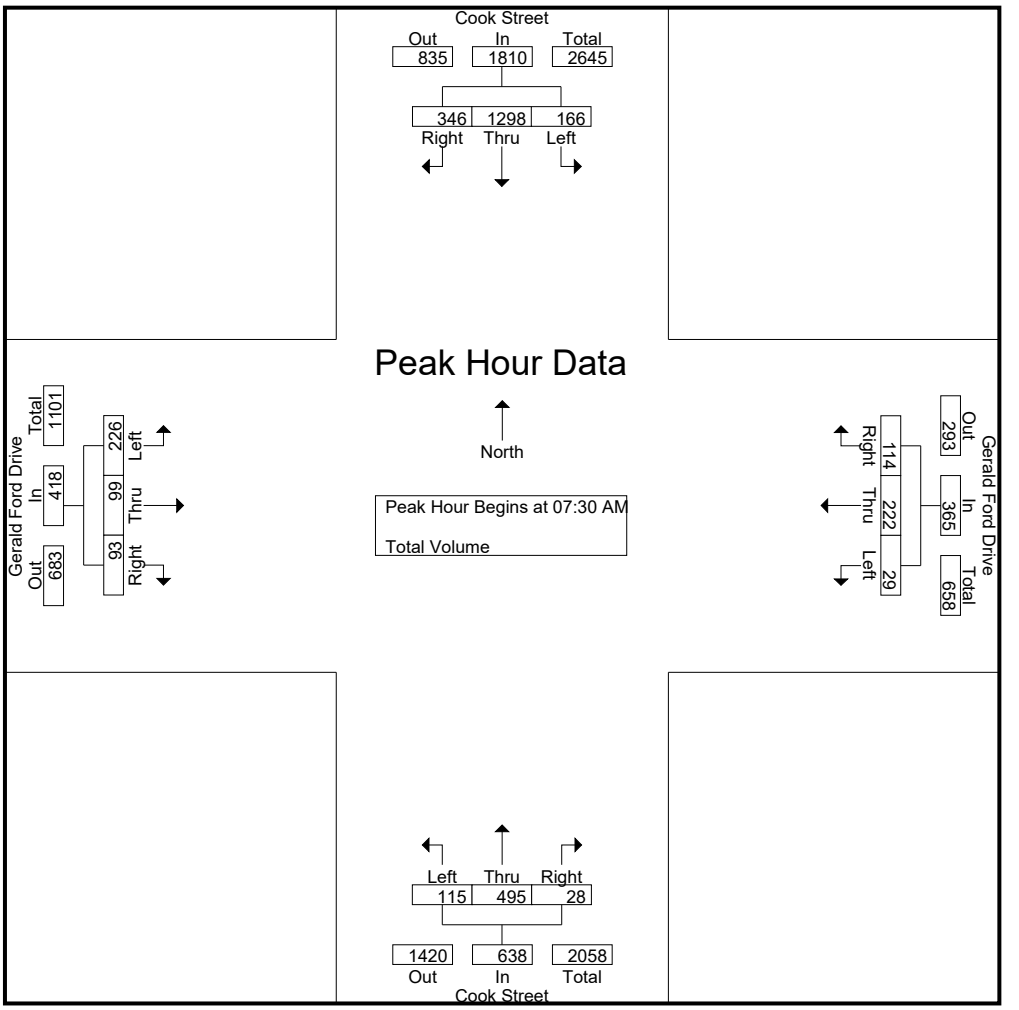

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				08:00 AM				07:45 AM			
+0 mins.	36	286	85	407	**9**	**74**	30	**113**	35	123	3	161	**73**	28	**32**	**133**
+15 mins.	26	371	104	501	6	58	29	93	24	129	**8**	161	53	24	25	102
+30 mins.	**60**	**373**	**111**	**544**	7	40	**33**	80	**45**	**186**	6	**237**	47	21	19	87
+45 mins.	34	275	75	384	5	60	26	91	36	136	8	180	62	**32**	20	114
Total Volume	156	1305	375	1836	27	232	118	377	140	574	25	739	235	105	96	436
% App. Total	8.5	71.1	20.4		7.2	61.5	31.3		18.9	77.7	3.4		53.9	24.1	22	
PHF	.650	.875	.845	.844	.750	.784	.894	.834	.778	.772	.781	.780	.805	.820	.750	.820

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City of Palm Desert
N/S: Cook Street
E/W: Gerald Ford Drive
Weather: Clear

File Name : 07_PLD_Cook_Ger PM
Site Code : 05122326
Start Date : 4/27/2022
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Groups Printed- Total Volume

	Cook Street Southbound				Gerald Ford Drive Westbound				Cook Street Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	30	168	36	234	13	47	37	97	60	248	7	315	90	57	39	186	832
04:15 PM	25	176	43	244	12	44	23	79	35	213	8	256	91	39	18	148	727
04:30 PM	39	141	45	225	13	46	37	96	35	238	5	278	112	54	34	200	799
04:45 PM	40	157	31	228	16	36	39	91	36	210	3	249	78	39	25	142	710
Total	134	642	155	931	54	173	136	363	166	909	23	1098	371	189	116	676	3068
05:00 PM	38	162	42	242	16	40	39	95	24	254	9	287	96	62	23	181	805
05:15 PM	37	173	42	252	13	44	35	92	61	243	8	312	106	57	16	179	835
05:30 PM	33	153	52	238	13	28	36	77	32	178	4	214	91	33	24	148	677
05:45 PM	45	129	34	208	16	26	28	70	53	124	6	183	76	41	17	134	595
Total	153	617	170	940	58	138	138	334	170	799	27	996	369	193	80	642	2912
Grand Total	287	1259	325	1871	112	311	274	697	336	1708	50	2094	740	382	196	1318	5980
Apprch %	15.3	67.3	17.4		16.1	44.6	39.3		16	81.6	2.4		56.1	29	14.9		
Total %	4.8	21.1	5.4	31.3	1.9	5.2	4.6	11.7	5.6	28.6	0.8	35	12.4	6.4	3.3	22	

	Cook Street Southbound				Gerald Ford Drive Westbound				Cook Street Northbound				Gerald Ford Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	39	141	**45**	225	13	**46**	37	**96**	35	238	5	278	**112**	54	**34**	**200**	799
04:45 PM	**40**	157	31	228	**16**	36	**39**	91	36	210	3	249	78	39	25	142	710
05:00 PM	38	162	42	242	16	40	39	95	24	**254**	**9**	287	96	**62**	23	181	805
05:15 PM	37	**173**	42	**252**	13	44	35	92	**61**	243	8	**312**	106	57	16	179	**835**
Total Volume	154	633	160	947	58	166	150	374	156	945	25	1126	392	212	98	702	3149
% App. Total	16.3	66.8	16.9		15.5	44.4	40.1		13.9	83.9	2.2		55.8	30.2	14		
PHF	.963	.915	.889	.939	.906	.902	.962	.974	.639	.930	.694	.902	.875	.855	.721	.878	.943

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City of Palm Desert
N/S: Cook Street
E/W: Gerald Ford Drive
Weather: Clear

File Name : 07_PLD_Cook_Ger PM
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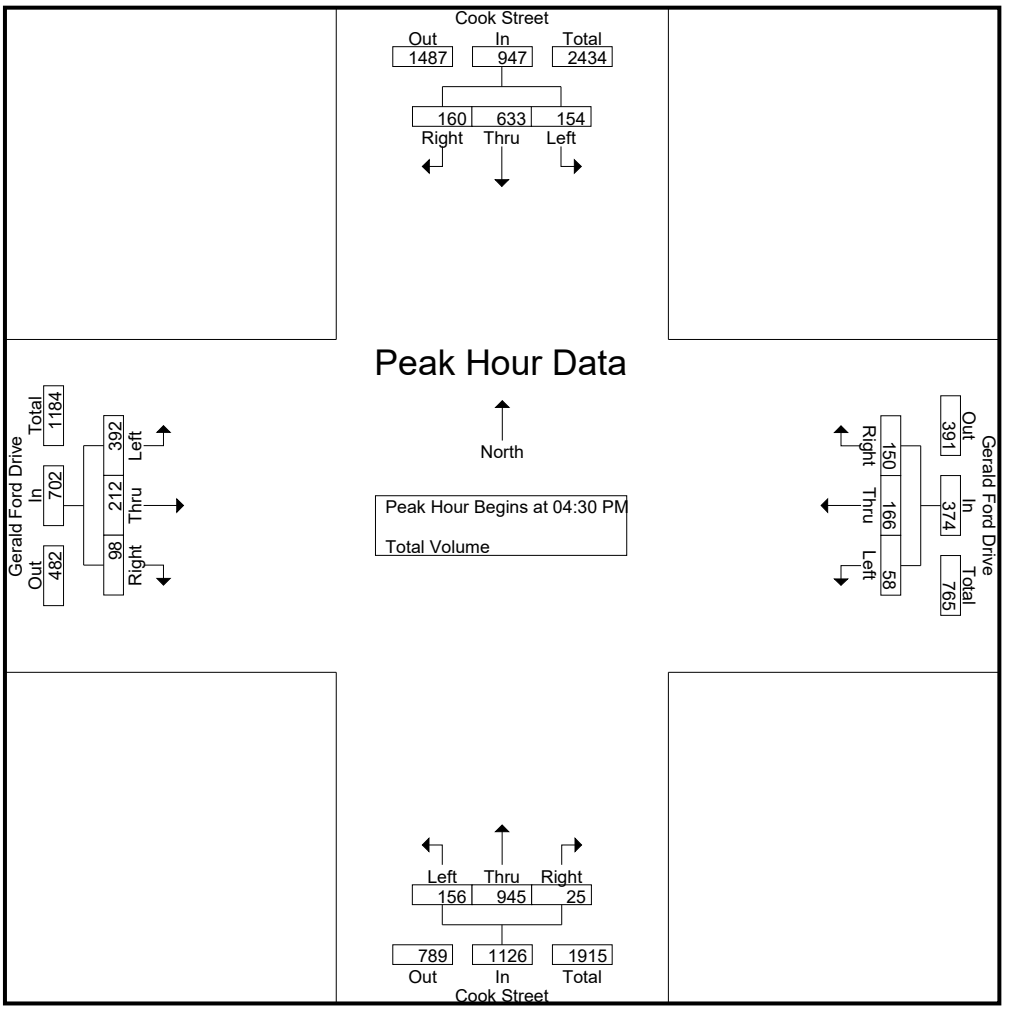

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**40**	157	31	228	13	**46**	37	**96**	35	238	5	278	**112**	54	**34**	**200**
+15 mins.	38	162	42	242	**16**	36	**39**	91	36	210	3	249	78	39	25	142
+30 mins.	37	**173**	42	**252**	16	40	39	95	24	**254**	**9**	287	96	**62**	23	181
+45 mins.	33	153	**52**	238	13	44	35	92	**61**	243	8	**312**	106	57	16	179
Total Volume	148	645	167	960	58	166	150	374	156	945	25	1126	392	212	98	702
% App. Total	15.4	67.2	17.4		15.5	44.4	40.1		13.9	83.9	2.2		55.8	30.2	14	
PHF	.925	.932	.803	.952	.906	.902	.962	.974	.639	.930	.694	.902	.875	.855	.721	.878

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City of Palm Desert
N/S: Portola Road
E/W: Julie Drive/College Drive
Weather: Clear

File Name : 08_PLD_Por_Col AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				College Drive Westbound				Portola Road Northbound				Julie Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	43	11	56	3	0	3	6	0	53	0	53	2	5	1	8	123
07:15 AM	3	67	11	81	1	2	1	4	0	46	5	51	4	3	1	8	144
07:30 AM	5	98	8	111	1	3	1	5	2	86	3	91	6	6	6	18	225
07:45 AM	1	106	7	114	2	1	3	6	2	103	6	111	8	4	3	15	246
Total	11	314	37	362	7	6	8	21	4	288	14	306	20	18	11	49	738
08:00 AM	2	67	6	75	2	1	0	3	2	109	7	118	5	3	3	11	207
08:15 AM	1	73	8	82	0	0	3	3	0	99	1	100	8	4	5	17	202
08:30 AM	1	76	5	82	3	1	0	4	1	58	5	64	13	7	4	24	174
08:45 AM	2	75	10	87	1	5	4	10	0	77	6	83	9	4	4	17	197
Total	6	291	29	326	6	7	7	20	3	343	19	365	35	18	16	69	780
Grand Total	17	605	66	688	13	13	15	41	7	631	33	671	55	36	27	118	1518
Apprch %	2.5	87.9	9.6		31.7	31.7	36.6		1	94	4.9		46.6	30.5	22.9		
Total %	1.1	39.9	4.3	45.3	0.9	0.9	1	2.7	0.5	41.6	2.2	44.2	3.6	2.4	1.8	7.8	

	Portola Road Southbound				College Drive Westbound				Portola Road Northbound				Julie Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**5**	98	**8**	111	1	**3**	1	5	**2**	86	3	91	6	**6**	**6**	**18**	225
07:45 AM	1	**106**	7	**114**	**2**	1	**3**	**6**	2	103	6	111	**8**	4	3	15	**246**
08:00 AM	2	67	6	75	2	1	0	3	2	**109**	**7**	**118**	5	3	3	11	207
08:15 AM	1	73	8	82	0	0	3	3	0	99	1	100	8	4	5	17	202
Total Volume	9	344	29	382	5	5	7	17	6	397	17	420	27	17	17	61	880
% App. Total	2.4	90.1	7.6		29.4	29.4	41.2		1.4	94.5	4		44.3	27.9	27.9		
PHF	.450	.811	.906	.838	.625	.417	.583	.708	.750	.911	.607	.890	.844	.708	.708	.847	.894

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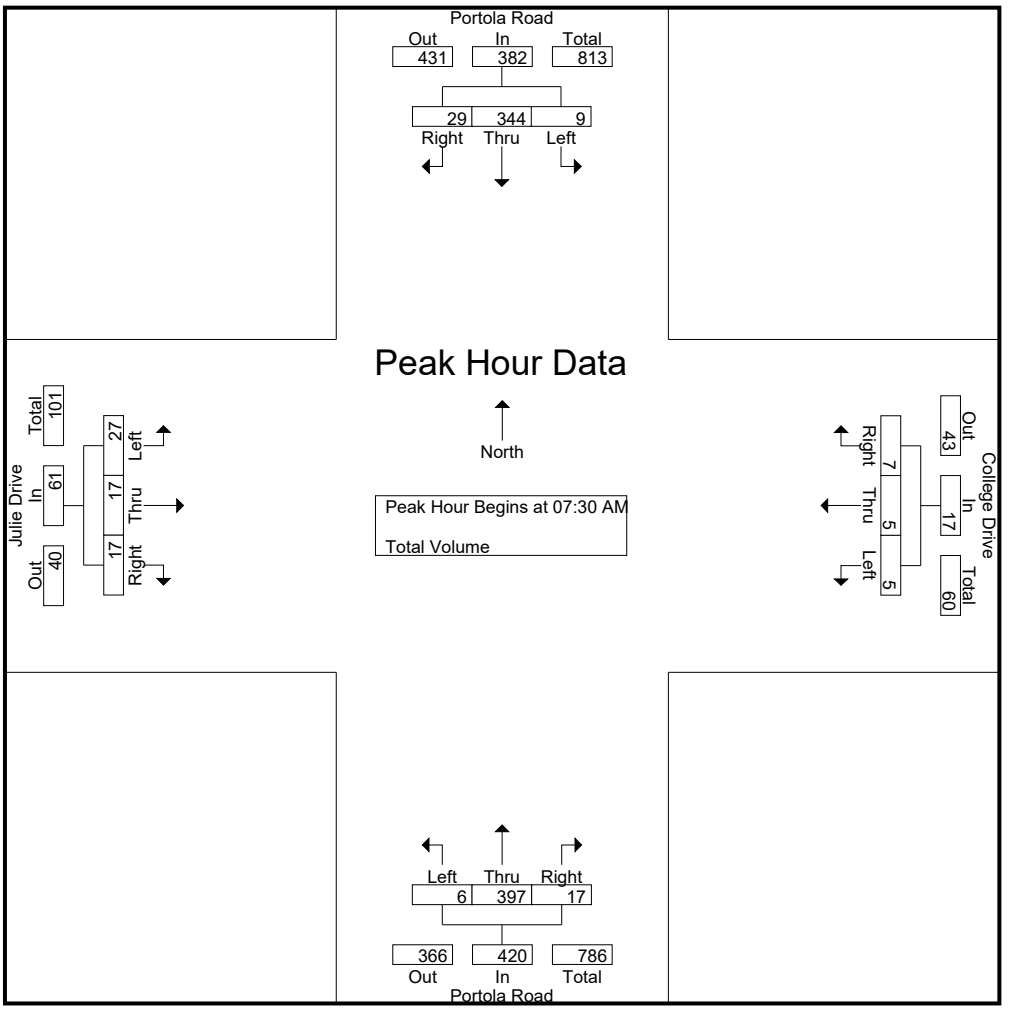
City of Palm Desert
N/S: Portola Road
E/W: Julie Drive/College Drive
Weather: Clear

File Name : 08_PLD_Por_Col AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:30 AM				08:00 AM			
+0 mins.	**5**	98	**8**	111	**3**	0	**3**	**6**	**2**	86	3	91	5	3	3	11
+15 mins.	1	**106**	7	**114**	1	2	1	4	2	103	6	111	8	4	**5**	17
+30 mins.	2	67	6	75	1	**3**	1	5	2	**109**	**7**	**118**	**13**	**7**	4	**24**
+45 mins.	1	73	8	82	2	1	3	6	0	99	1	100	9	4	4	17
Total Volume	9	344	29	382	7	6	8	21	6	397	17	420	35	18	16	69
% App. Total	2.4	90.1	7.6		33.3	28.6	38.1		1.4	94.5	4		50.7	26.1	23.2	
PHF	.450	.811	.906	.838	.583	.500	.667	.875	.750	.911	.607	.890	.673	.643	.800	.719

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City of Palm Desert
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File Name : 08_PLD_Por_Col PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				College Drive Westbound				Portola Road Northbound				Julie Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	91	8	100	3	0	3	6	3	114	3	120	9	2	2	13	239
04:15 PM	3	87	9	99	4	1	0	5	0	101	1	102	17	2	2	21	227
04:30 PM	0	77	9	86	4	1	1	6	0	93	4	97	11	3	1	15	204
04:45 PM	1	77	16	94	2	1	1	4	2	91	1	94	12	5	3	20	212
Total	5	332	42	379	13	3	5	21	5	399	9	413	49	12	8	69	882
05:00 PM	1	76	10	87	5	5	0	10	0	110	4	114	9	1	1	11	222
05:15 PM	0	71	9	80	2	2	5	9	1	99	3	103	8	2	0	10	202
05:30 PM	2	80	9	91	3	2	1	6	1	85	1	87	17	0	2	19	203
05:45 PM	0	62	18	80	0	0	1	1	0	74	2	76	8	0	1	9	166
Total	3	289	46	338	10	9	7	26	2	368	10	380	42	3	4	49	793
Grand Total	8	621	88	717	23	12	12	47	7	767	19	793	91	15	12	118	1675
Apprch %	1.1	86.6	12.3		48.9	25.5	25.5		0.9	96.7	2.4		77.1	12.7	10.2		
Total %	0.5	37.1	5.3	42.8	1.4	0.7	0.7	2.8	0.4	45.8	1.1	47.3	5.4	0.9	0.7	7	

	Portola Road Southbound				College Drive Westbound				Portola Road Northbound				Julie Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	**91**	8	**100**	3	0	**3**	**6**	**3**	**114**	3	**120**	9	2	2	13	**239**
04:15 PM	**3**	87	9	99	**4**	**1**	0	5	0	101	1	102	**17**	2	2	**21**	227
04:30 PM	0	77	9	86	4	1	1	6	0	93	**4**	97	11	3	1	15	204
04:45 PM	1	77	**16**	94	2	1	1	4	2	91	1	94	12	**5**	**3**	20	212
Total Volume	5	332	42	379	13	3	5	21	5	399	9	413	49	12	8	69	882
% App. Total	1.3	87.6	11.1		61.9	14.3	23.8		1.2	96.6	2.2		71	17.4	11.6		
PHF	.417	.912	.656	.948	.813	.750	.417	.875	.417	.875	.563	.860	.721	.600	.667	.821	.923

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File Name : 08_PLD_Por_Col PM
Site Code : 05122326
Start Date : 4/27/2022
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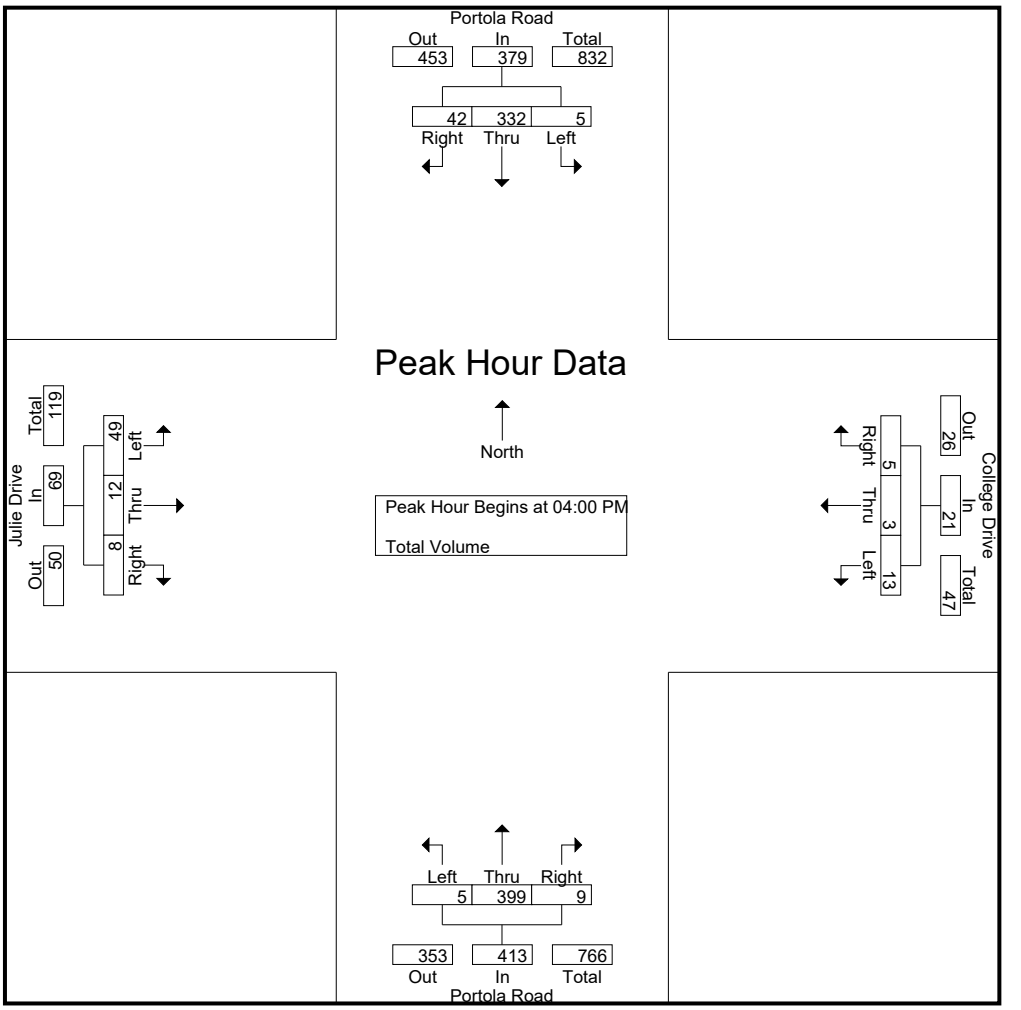

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:00 PM			
+0 mins.	1	**91**	8	**100**	4	1	1	6	**3**	**114**	3	**120**	9	2	2	13
+15 mins.	**3**	87	9	99	2	1	1	4	0	101	1	102	**17**	2	2	**21**
+30 mins.	0	77	9	86	**5**	**5**	0	**10**	0	93	**4**	97	11	3	1	15
+45 mins.	1	77	**16**	94	2	2	**5**	9	2	91	1	94	12	**5**	**3**	20
Total Volume	5	332	42	379	13	9	7	29	5	399	9	413	49	12	8	69
% App. Total	1.3	87.6	11.1		44.8	31	24.1		1.2	96.6	2.2		71	17.4	11.6	
PHF	.417	.912	.656	.948	.650	.450	.350	.725	.417	.875	.563	.860	.721	.600	.667	.821

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City of Palm Desert
N/S: Portola Road
E/W: Frank Sinatra Drive
Weather: Clear

File Name : 04_PLD_Port_Frank AM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Frank Sinatra Drive Westbound				Portola Road Northbound				Frank Sinatra Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	43	4	53	20	100	3	123	15	49	4	68	1	40	10	51	295
07:15 AM	8	69	4	81	23	140	4	167	19	54	8	81	5	52	25	82	411
07:30 AM	5	97	3	105	32	164	5	201	30	72	14	116	5	64	31	100	522
07:45 AM	13	102	4	119	38	161	4	203	31	101	23	155	3	75	34	112	589
Total	32	311	15	358	113	565	16	694	95	276	49	420	14	231	100	345	1817
08:00 AM	9	58	10	77	38	131	4	173	31	108	16	155	3	65	27	95	500
08:15 AM	6	73	3	82	22	141	5	168	27	81	12	120	6	63	23	92	462
08:30 AM	8	68	3	79	27	124	2	153	32	62	16	110	6	64	30	100	442
08:45 AM	15	65	3	83	35	129	8	172	22	68	17	107	3	96	24	123	485
Total	38	264	19	321	122	525	19	666	112	319	61	492	18	288	104	410	1889
Grand Total	70	575	34	679	235	1090	35	1360	207	595	110	912	32	519	204	755	3706
Apprch %	10.3	84.7	5		17.3	80.1	2.6		22.7	65.2	12.1		4.2	68.7	27		
Total %	1.9	15.5	0.9	18.3	6.3	29.4	0.9	36.7	5.6	16.1	3	24.6	0.9	14	5.5	20.4	

	Portola Road Southbound				Frank Sinatra Drive Westbound				Portola Road Northbound				Frank Sinatra Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	97	3	105	32	**164**	**5**	201	30	72	14	116	5	64	31	100	522
07:45 AM	**13**	**102**	4	**119**	**38**	161	4	**203**	**31**	101	**23**	**155**	3	**75**	**34**	**112**	**589**
08:00 AM	9	58	**10**	77	38	131	4	173	31	**108**	16	155	3	65	27	95	500
08:15 AM	6	73	3	82	22	141	5	168	27	81	12	120	**6**	63	23	92	462
Total Volume	33	330	20	383	130	597	18	745	119	362	65	546	17	267	115	399	2073
% App. Total	8.6	86.2	5.2		17.4	80.1	2.4		21.8	66.3	11.9		4.3	66.9	28.8		
PHF	.635	.809	.500	.805	.855	.910	.900	.917	.960	.838	.707	.881	.708	.890	.846	.891	.880

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City of Palm Desert
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Weather: Clear

File Name : 04_PLD_Port_Frank AM
Site Code : 05122144
Start Date : 3/9/2022
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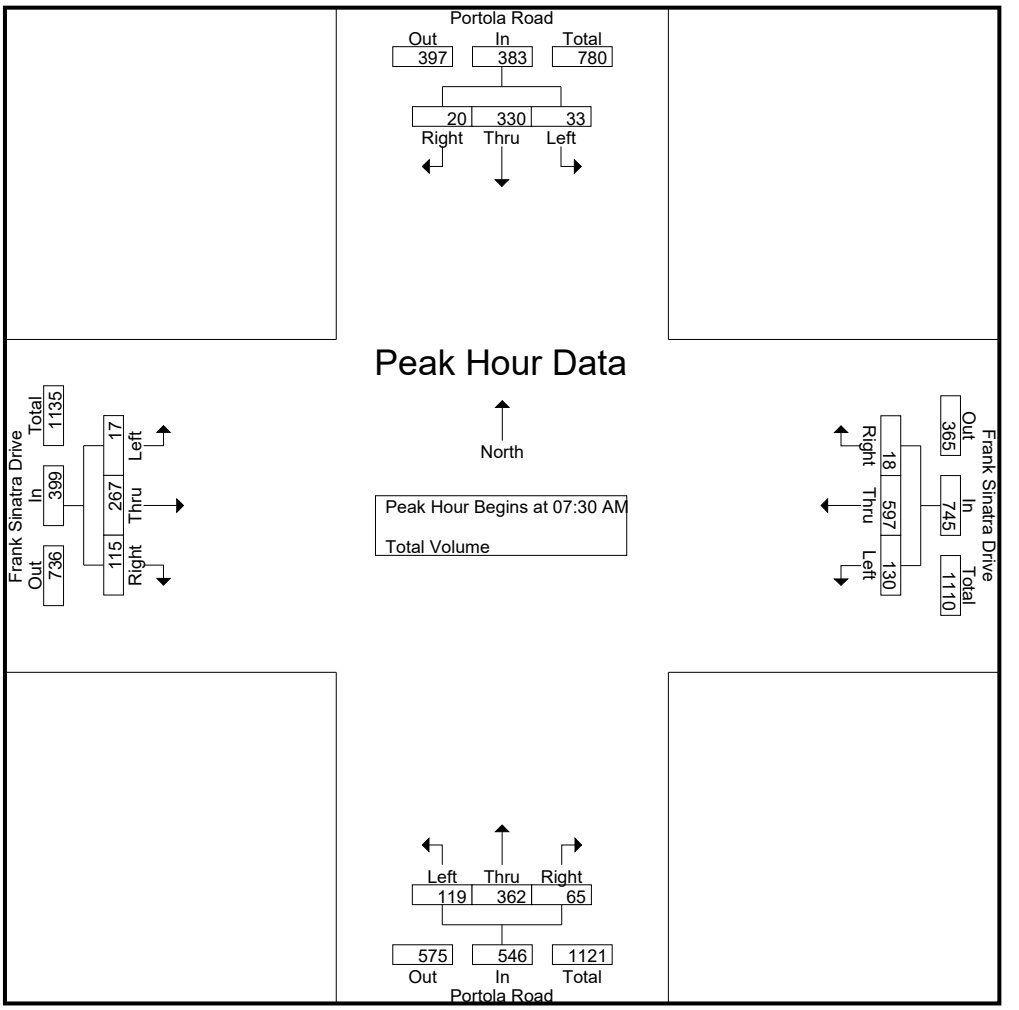

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				08:00 AM			
+0 mins.	5	97	3	105	32	**164**	**5**	201	30	72	14	116	3	65	27	95
+15 mins.	**13**	**102**	4	**119**	**38**	161	4	**203**	**31**	101	**23**	**155**	**6**	63	23	92
+30 mins.	9	58	**10**	77	38	131	4	173	31	**108**	16	155	6	64	**30**	100
+45 mins.	6	73	3	82	22	141	5	168	27	81	12	120	3	**96**	24	**123**
Total Volume	33	330	20	383	130	597	18	745	119	362	65	546	18	288	104	410
% App. Total	8.6	86.2	5.2		17.4	80.1	2.4		21.8	66.3	11.9		4.4	70.2	25.4	
PHF	.635	.809	.500	.805	.855	.910	.900	.917	.960	.838	.707	.881	.750	.750	.867	.833

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City of Palm Desert
N/S: Portola Road
E/W: Frank Sinatra Drive
Weather: Clear

File Name : 04_PLD_Port_Frank PM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Frank Sinatra Drive Westbound				Portola Road Northbound				Frank Sinatra Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	20	69	9	98	21	79	11	111	38	116	29	183	2	105	18	125	517
04:15 PM	30	79	9	118	20	90	5	115	29	95	20	144	2	160	25	187	564
04:30 PM	8	61	7	76	16	85	6	107	35	101	29	165	4	115	18	137	485
04:45 PM	14	61	8	83	32	82	1	115	36	95	24	155	2	131	23	156	509
Total	72	270	33	375	89	336	23	448	138	407	102	647	10	511	84	605	2075
05:00 PM	15	79	4	98	22	97	1	120	30	99	27	156	4	167	16	187	561
05:15 PM	14	60	5	79	27	94	6	127	39	89	32	160	3	146	27	176	542
05:30 PM	14	56	3	73	16	85	3	104	35	101	27	163	3	94	18	115	455
05:45 PM	4	59	0	63	18	69	13	100	32	79	20	131	6	97	20	123	417
Total	47	254	12	313	83	345	23	451	136	368	106	610	16	504	81	601	1975
Grand Total	119	524	45	688	172	681	46	899	274	775	208	1257	26	1015	165	1206	4050
Apprch %	17.3	76.2	6.5		19.1	75.8	5.1		21.8	61.7	16.5		2.2	84.2	13.7		
Total %	2.9	12.9	1.1	17	4.2	16.8	1.1	22.2	6.8	19.1	5.1	31	0.6	25.1	4.1	29.8	

	Portola Road Southbound				Frank Sinatra Drive Westbound				Portola Road Northbound				Frank Sinatra Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**30**	**79**	**9**	**118**	20	90	5	115	29	95	20	144	2	160	**25**	**187**	**564**
04:30 PM	8	61	7	76	16	85	**6**	107	35	**101**	**29**	**165**	**4**	115	18	137	485
04:45 PM	14	61	8	83	**32**	82	1	115	**36**	95	24	155	2	131	23	156	509
05:00 PM	15	79	4	98	22	**97**	1	**120**	30	99	27	156	4	**167**	16	187	561
Total Volume	67	280	28	375	90	354	13	457	130	390	100	620	12	573	82	667	2119
% App. Total	17.9	74.7	7.5		19.7	77.5	2.8		21	62.9	16.1		1.8	85.9	12.3		
PHF	.558	.886	.778	.794	.703	.912	.542	.952	.903	.965	.862	.939	.750	.858	.820	.892	.939

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File Name : 04_PLD_Port_Frank PM
Site Code : 05122144
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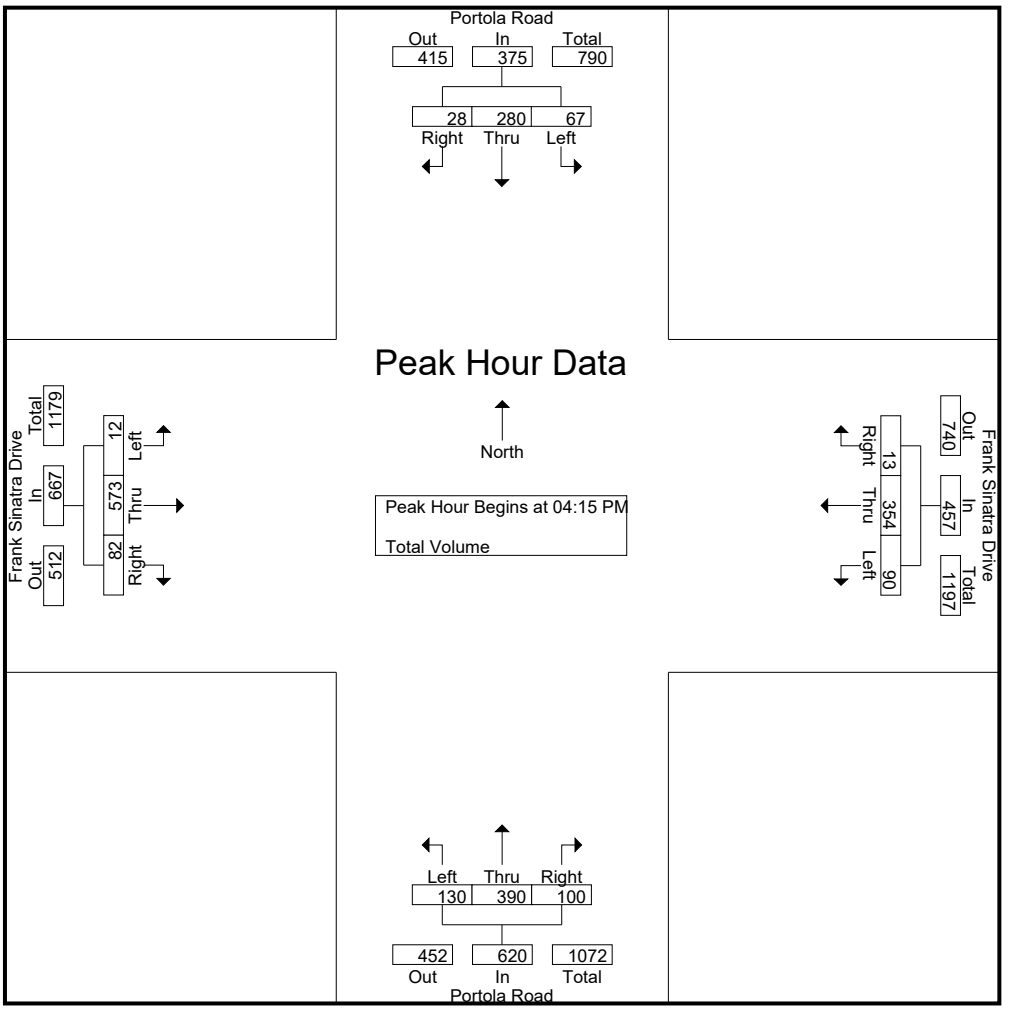

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:15 PM			
+0 mins.	20	69	**9**	98	16	85	**6**	107	**38**	**116**	**29**	**183**	2	160	**25**	**187**
+15 mins.	**30**	**79**	9	**118**	**32**	82	1	115	29	95	20	144	**4**	115	18	137
+30 mins.	8	61	7	76	22	**97**	1	120	35	101	29	165	2	131	23	156
+45 mins.	14	61	8	83	27	94	6	**127**	36	95	24	155	4	**167**	16	187
Total Volume	72	270	33	375	97	358	14	469	138	407	102	647	12	573	82	667
% App. Total	19.2	72	8.8		20.7	76.3	3		21.3	62.9	15.8		1.8	85.9	12.3	
PHF	.600	.854	.917	.794	.758	.923	.583	.923	.908	.877	.879	.884	.750	.858	.820	.892

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Weather: Clear

File Name : 09_PLD_Port_Country AM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Country Club Drive Westbound				Portola Road Northbound				Country Club Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	47	8	70	22	91	8	121	9	53	19	81	2	40	13	55	327
07:15 AM	17	89	6	112	27	109	12	148	25	73	24	122	2	77	34	113	495
07:30 AM	14	122	6	142	40	158	16	214	29	102	25	156	5	76	39	120	632
07:45 AM	19	138	6	163	64	190	25	279	63	130	42	235	10	89	34	133	810
Total	65	396	26	487	153	548	61	762	126	358	110	594	19	282	120	421	2264
08:00 AM	18	91	13	122	31	177	18	226	38	98	31	167	14	91	31	136	651
08:15 AM	16	85	9	110	33	163	17	213	46	97	28	171	8	86	41	135	629
08:30 AM	12	103	12	127	32	155	22	209	51	82	33	166	8	92	45	145	647
08:45 AM	15	98	10	123	38	154	16	208	57	87	33	177	8	98	57	163	671
Total	61	377	44	482	134	649	73	856	192	364	125	681	38	367	174	579	2598
Grand Total	126	773	70	969	287	1197	134	1618	318	722	235	1275	57	649	294	1000	4862
Apprch %	13	79.8	7.2		17.7	74	8.3		24.9	56.6	18.4		5.7	64.9	29.4		
Total %	2.6	15.9	1.4	19.9	5.9	24.6	2.8	33.3	6.5	14.8	4.8	26.2	1.2	13.3	6	20.6	

	Portola Road Southbound				Country Club Drive Westbound				Portola Road Northbound				Country Club Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**19**	**138**	6	**163**	**64**	**190**	**25**	**279**	**63**	**130**	**42**	**235**	10	89	34	133	**810**
08:00 AM	18	91	**13**	122	31	177	18	226	38	98	31	167	**14**	91	31	136	651
08:15 AM	16	85	9	110	33	163	17	213	46	97	28	171	8	86	41	135	629
08:30 AM	12	103	12	127	32	155	22	209	51	82	33	166	8	**92**	**45**	**145**	647
Total Volume	65	417	40	522	160	685	82	927	198	407	134	739	40	358	151	549	2737
% App. Total	12.5	79.9	7.7		17.3	73.9	8.8		26.8	55.1	18.1		7.3	65.2	27.5		
PHF	.855	.755	.769	.801	.625	.901	.820	.831	.786	.783	.798	.786	.714	.973	.839	.947	.845

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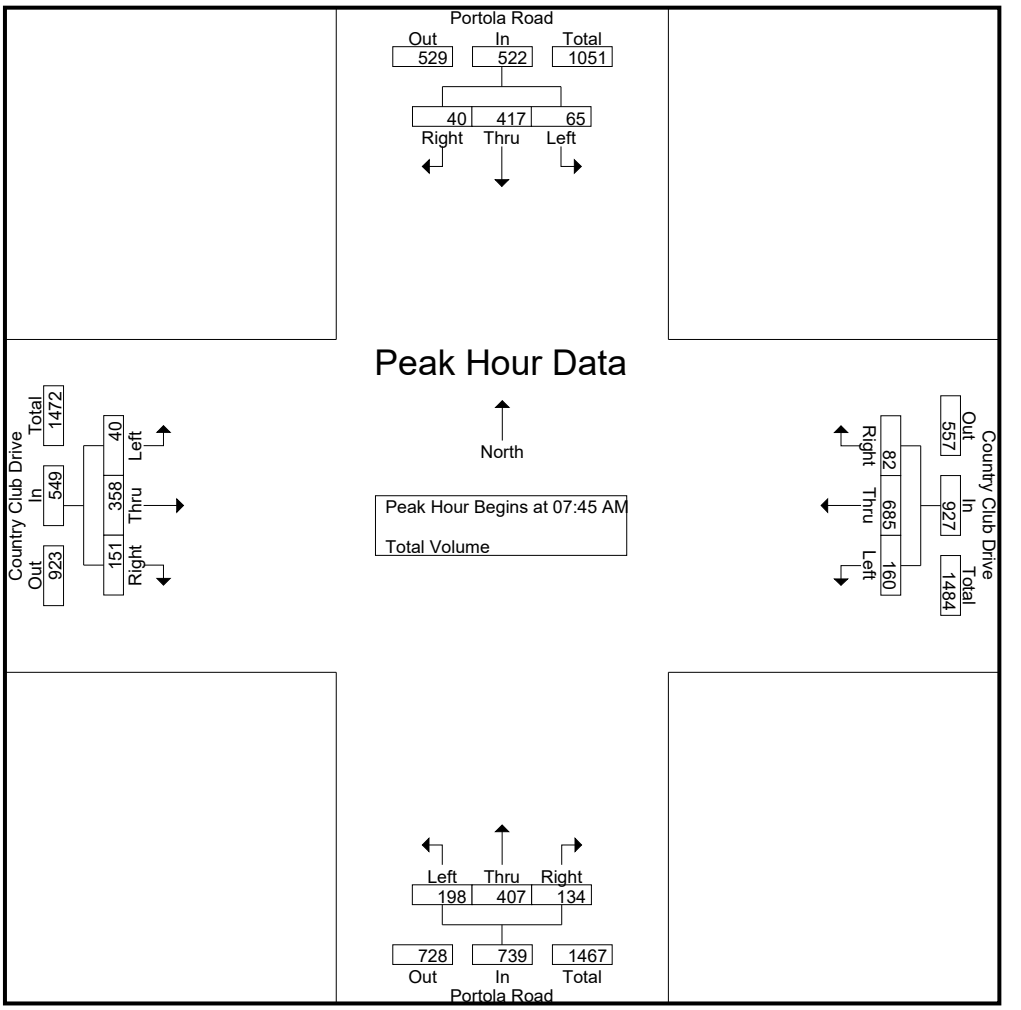
N/S: Portola Road
E/W: Country Club Drive
Weather: Clear

File Name : 09_PLD_Port_Country AM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	17	89	6	112	40	158	16	214	**63**	**130**	**42**	**235**	**14**	91	31	136
+15 mins.	14	122	6	142	**64**	**190**	**25**	**279**	38	98	31	167	8	86	41	135
+30 mins.	**19**	**138**	6	**163**	31	177	18	226	46	97	28	171	8	92	45	145
+45 mins.	18	91	**13**	122	33	163	17	213	51	82	33	166	8	**98**	**57**	**163**
Total Volume	68	440	31	539	168	688	76	932	198	407	134	739	38	367	174	579
% App. Total	12.6	81.6	5.8		18	73.8	8.2		26.8	55.1	18.1		6.6	63.4	30.1	
PHF	.895	.797	.596	.827	.656	.905	.760	.835	.786	.783	.798	.786	.679	.936	.763	.888

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Palm Desert
N/S: Portola Road
E/W: Country Club Drive
Weather: Clear

File Name : 09_PLD_Port_Country PM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 1

Groups Printed- Total Volume

	Portola Road Southbound				Country Club Drive Westbound				Portola Road Northbound				Country Club Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	87	10	121	25	125	24	174	51	125	33	209	10	177	41	228	732
04:15 PM	15	92	19	126	55	126	22	203	31	101	41	173	7	205	40	252	754
04:30 PM	12	79	8	99	46	121	37	204	45	122	48	215	7	190	45	242	760
04:45 PM	18	95	13	126	45	122	29	196	36	89	42	167	14	189	44	247	736
Total	69	353	50	472	171	494	112	777	163	437	164	764	38	761	170	969	2982
05:00 PM	23	92	14	129	25	146	31	202	44	122	46	212	5	192	44	241	784
05:15 PM	19	111	15	145	61	142	24	227	38	112	34	184	10	170	35	215	771
05:30 PM	11	71	9	91	40	129	17	186	37	130	25	192	12	173	37	222	691
05:45 PM	14	80	6	100	46	104	15	165	31	92	20	143	9	118	21	148	556
Total	67	354	44	465	172	521	87	780	150	456	125	731	36	653	137	826	2802
Grand Total	136	707	94	937	343	1015	199	1557	313	893	289	1495	74	1414	307	1795	5784
Apprch %	14.5	75.5	10		22	65.2	12.8		20.9	59.7	19.3		4.1	78.8	17.1		
Total %	2.4	12.2	1.6	16.2	5.9	17.5	3.4	26.9	5.4	15.4	5	25.8	1.3	24.4	5.3	31	

	Portola Road Southbound				Country Club Drive Westbound				Portola Road Northbound				Country Club Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	12	79	8	99	46	121	**37**	204	**45**	**122**	**48**	**215**	7	190	**45**	242	760
04:45 PM	18	95	13	126	45	122	29	196	36	89	42	167	**14**	189	44	**247**	736
05:00 PM	**23**	92	14	129	25	**146**	31	202	44	122	46	212	5	**192**	44	241	**784**
05:15 PM	19	**111**	**15**	**145**	**61**	142	24	**227**	38	112	34	184	10	170	35	215	771
Total Volume	72	377	50	499	177	531	121	829	163	445	170	778	36	741	168	945	3051
% App. Total	14.4	75.6	10		21.4	64.1	14.6		21	57.2	21.9		3.8	78.4	17.8		
PHF	.783	.849	.833	.860	.725	.909	.818	.913	.906	.912	.885	.905	.643	.965	.933	.956	.973

Counts Unlimited, Inc.
PO Box 1178
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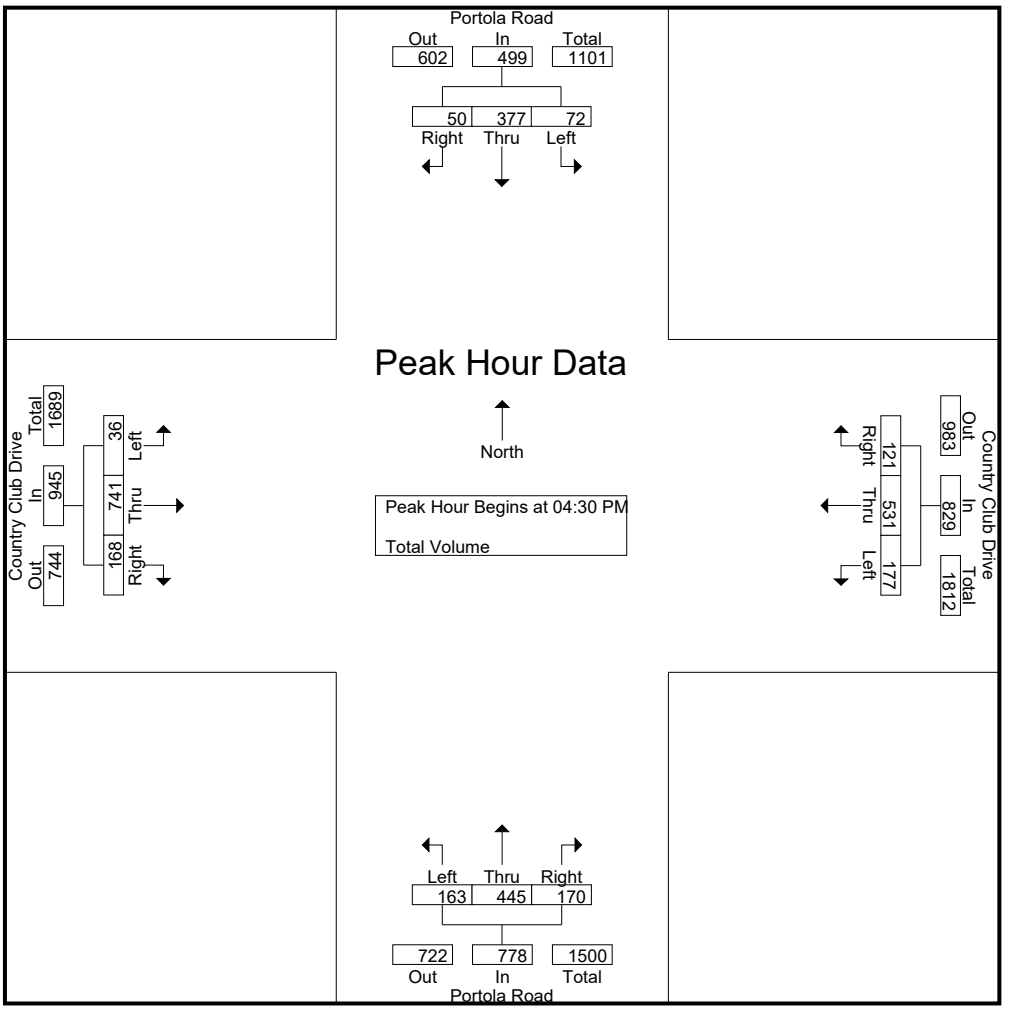
(951)268-6268

City of Palm Desert
N/S: Portola Road
E/W: Country Club Drive
Weather: Clear

File Name : 09_PLD_Port_Country PM
Site Code : 05122144
Start Date : 3/9/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:15 PM			
+0 mins.	12	79	8	99	46	121	**37**	204	**45**	**122**	**48**	**215**	7	**205**	40	**252**
+15 mins.	18	95	13	126	45	122	29	196	36	89	42	167	7	190	**45**	242
+30 mins.	**23**	92	14	129	25	**146**	31	202	44	122	46	212	**14**	189	44	247
+45 mins.	19	**111**	**15**	**145**	**61**	142	24	**227**	38	112	34	184	5	192	44	241
Total Volume	72	377	50	499	177	531	121	829	163	445	170	778	33	776	173	982
% App. Total	14.4	75.6	10		21.4	64.1	14.6		21	57.2	21.9		3.4	79	17.6	
PHF	.783	.849	.833	.860	.725	.909	.818	.913	.906	.912	.885	.905	.589	.946	.961	.974

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PO Box 1178
Corona, CA 92878
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City of Palm Desert
N/S: Monterey Avenue
E/W: Dinah Shore Drive
Weather: Clear

File Name : 11_PLD_Mont_Din AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Monterey Avenue Southbound				Dinah Shore Drive Westbound				Monterey Avenue Northbound				Dinah Shore Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	80	219	80	379	5	38	51	94	31	95	6	132	38	30	21	89	694
07:15 AM	105	243	85	433	3	39	60	102	24	72	4	100	51	54	32	137	772
07:30 AM	95	292	82	469	17	53	73	143	31	78	4	113	52	46	49	147	872
07:45 AM	116	394	91	601	9	42	63	114	29	82	5	116	61	61	46	168	999
Total	396	1148	338	1882	34	172	247	453	115	327	19	461	202	191	148	541	3337
08:00 AM	79	232	77	388	14	53	72	139	33	106	7	146	65	39	32	136	809
08:15 AM	99	283	65	447	11	59	71	141	30	94	2	126	75	67	45	187	901
08:30 AM	85	264	75	424	14	46	64	124	43	104	4	151	64	46	39	149	848
08:45 AM	88	267	80	435	16	47	63	126	32	76	6	114	62	78	30	170	845
Total	351	1046	297	1694	55	205	270	530	138	380	19	537	266	230	146	642	3403
Grand Total	747	2194	635	3576	89	377	517	983	253	707	38	998	468	421	294	1183	6740
Apprch %	20.9	61.4	17.8		9.1	38.4	52.6		25.4	70.8	3.8		39.6	35.6	24.9		
Total %	11.1	32.6	9.4	53.1	1.3	5.6	7.7	14.6	3.8	10.5	0.6	14.8	6.9	6.2	4.4	17.6	

	Monterey Avenue Southbound				Dinah Shore Drive Westbound				Monterey Avenue Northbound				Dinah Shore Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	95	292	82	469	**17**	53	**73**	**143**	31	78	4	113	52	46	**49**	147	872
07:45 AM	**116**	**394**	**91**	**601**	9	42	63	114	29	82	5	116	61	61	46	168	**999**
08:00 AM	79	232	77	388	14	53	72	139	**33**	**106**	**7**	**146**	65	39	32	136	809
08:15 AM	99	283	65	447	11	**59**	71	141	30	94	2	126	**75**	**67**	45	**187**	901
Total Volume	389	1201	315	1905	51	207	279	537	123	360	18	501	253	213	172	638	3581
% App. Total	20.4	63	16.5		9.5	38.5	52		24.6	71.9	3.6		39.7	33.4	27		
PHF	.838	.762	.865	.792	.750	.877	.955	.939	.932	.849	.643	.858	.843	.795	.878	.853	.896

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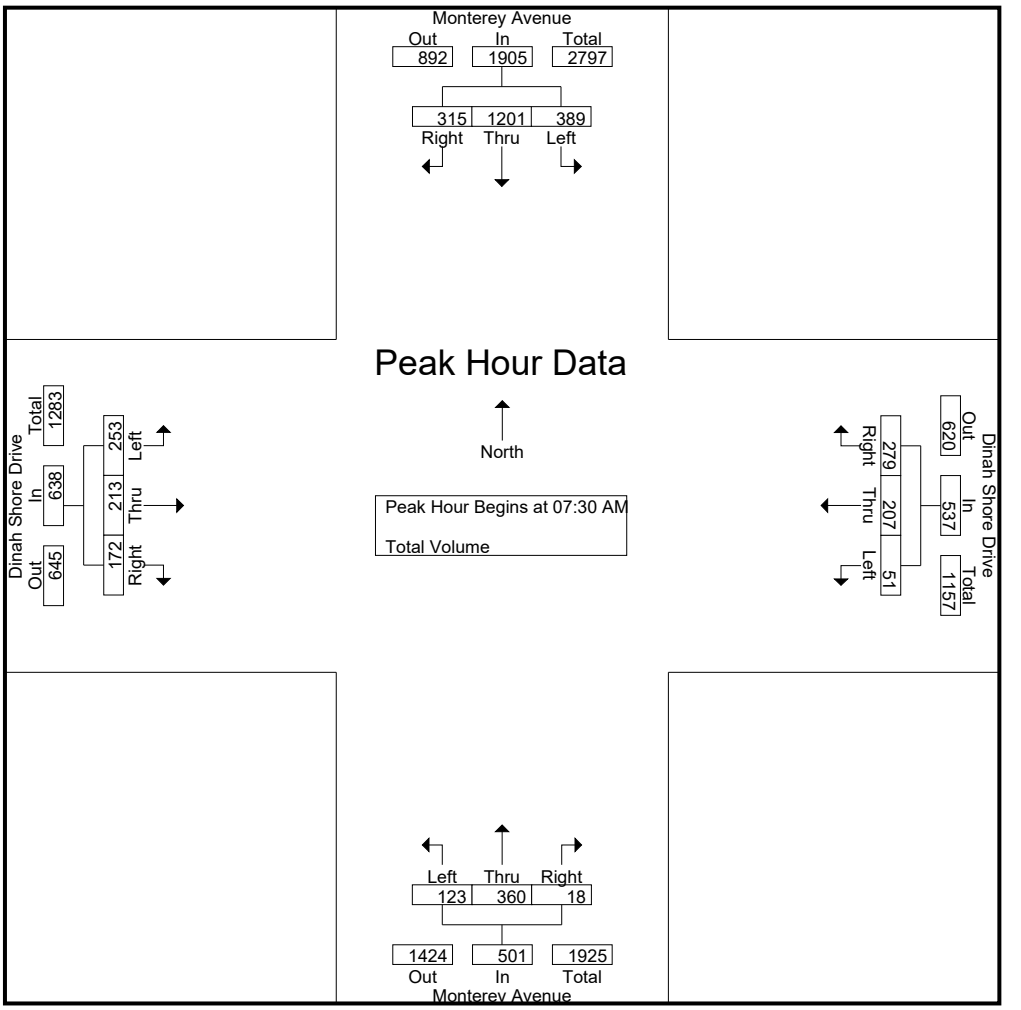
City of Palm Desert
N/S: Monterey Avenue
E/W: Dinah Shore Drive
Weather: Clear

File Name : 11_PLD_Mont_Din AM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	95	292	82	469	**17**	53	**73**	**143**	29	82	5	116	65	39	32	136
+15 mins.	**116**	**394**	**91**	**601**	9	42	63	114	33	**106**	**7**	146	**75**	67	**45**	**187**
+30 mins.	79	232	77	388	14	53	72	139	30	94	2	126	64	46	39	149
+45 mins.	99	283	65	447	11	**59**	71	141	**43**	104	4	**151**	62	**78**	30	170
Total Volume	389	1201	315	1905	51	207	279	537	135	386	18	539	266	230	146	642
% App. Total	20.4	63	16.5		9.5	38.5	52		25	71.6	3.3		41.4	35.8	22.7	
PHF	.838	.762	.865	.792	.750	.877	.955	.939	.785	.910	.643	.892	.887	.737	.811	.858

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City of Palm Desert
N/S: Monterey Avenue
E/W: Dinah Shore Drive
Weather: Clear

File Name : 11_PLD_Mont_Din PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 1

Groups Printed- Total Volume

	Monterey Avenue Southbound				Dinah Shore Drive Westbound				Monterey Avenue Northbound				Dinah Shore Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	82	151	87	320	16	79	131	226	73	236	4	313	172	79	63	314	1173
04:15 PM	93	184	75	352	13	59	125	197	68	204	7	279	118	80	53	251	1079
04:30 PM	71	162	83	316	12	85	138	235	90	249	6	345	108	55	73	236	1132
04:45 PM	77	197	90	364	13	75	121	209	65	222	7	294	134	72	58	264	1131
Total	323	694	335	1352	54	298	515	867	296	911	24	1231	532	286	247	1065	4515
05:00 PM	72	161	78	311	11	98	170	279	66	253	10	329	131	66	57	254	1173
05:15 PM	86	173	66	325	6	78	142	226	74	212	5	291	130	83	68	281	1123
05:30 PM	58	171	89	318	15	72	121	208	44	215	7	266	118	68	57	243	1035
05:45 PM	87	178	52	317	8	68	78	154	39	187	7	233	122	67	61	250	954
Total	303	683	285	1271	40	316	511	867	223	867	29	1119	501	284	243	1028	4285
Grand Total	626	1377	620	2623	94	614	1026	1734	519	1778	53	2350	1033	570	490	2093	8800
Apprch %	23.9	52.5	23.6		5.4	35.4	59.2		22.1	75.7	2.3		49.4	27.2	23.4		
Total %	7.1	15.6	7	29.8	1.1	7	11.7	19.7	5.9	20.2	0.6	26.7	11.7	6.5	5.6	23.8	

	Monterey Avenue Southbound				Dinah Shore Drive Westbound				Monterey Avenue Northbound				Dinah Shore Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	71	162	83	316	12	85	138	235	**90**	249	6	**345**	108	55	**73**	236	1132
04:45 PM	77	**197**	**90**	**364**	**13**	75	121	209	65	222	7	294	**134**	72	58	264	1131
05:00 PM	72	161	78	311	11	**98**	**170**	**279**	66	**253**	**10**	329	131	66	57	254	**1173**
05:15 PM	**86**	173	66	325	6	78	142	226	74	212	5	291	130	**83**	68	**281**	1123
Total Volume	306	693	317	1316	42	336	571	949	295	936	28	1259	503	276	256	1035	4559
% App. Total	23.3	52.7	24.1		4.4	35.4	60.2		23.4	74.3	2.2		48.6	26.7	24.7		
PHF	.890	.879	.881	.904	.808	.857	.840	.850	.819	.925	.700	.912	.938	.831	.877	.921	.972

Counts Unlimited, Inc.
PO Box 1178
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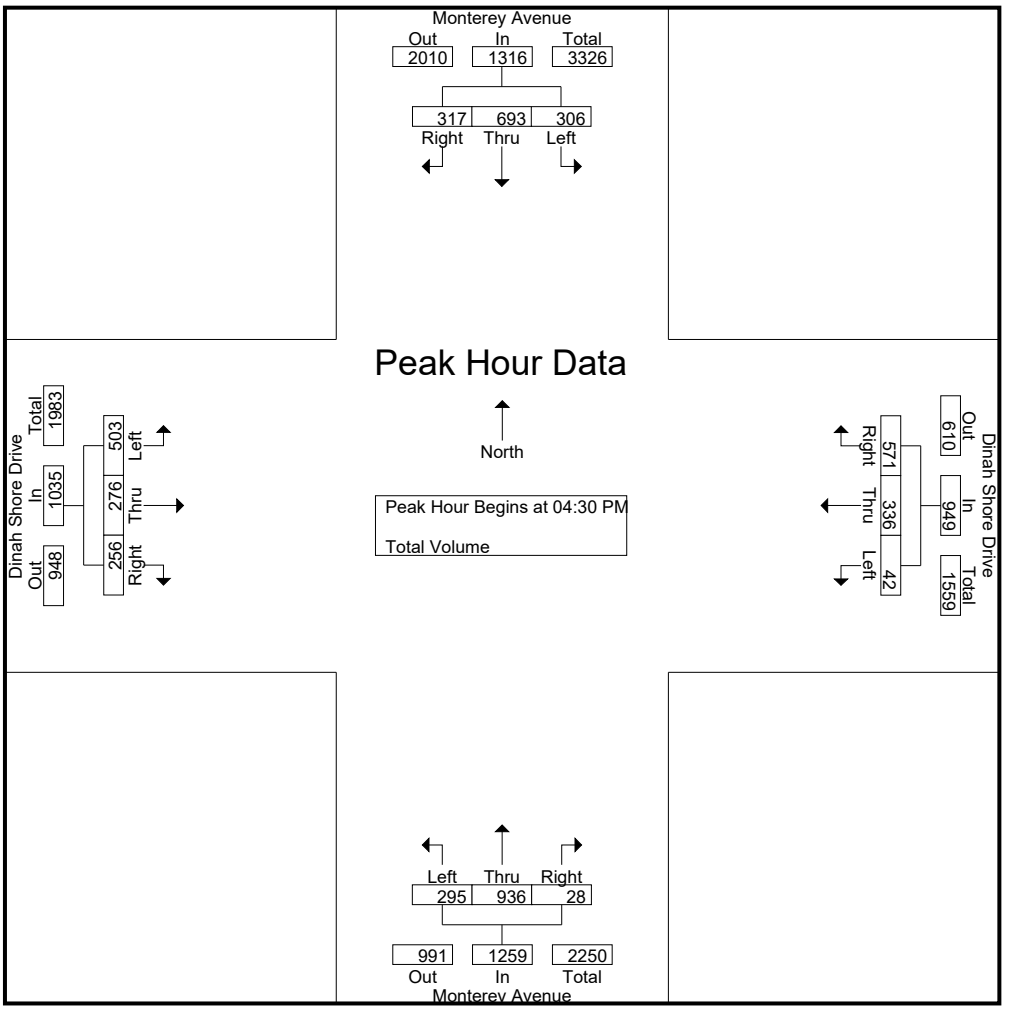
City of Palm Desert
N/S: Monterey Avenue
E/W: Dinah Shore Drive
Weather: Clear

File Name : 11_PLD_Mont_Din PM
Site Code : 05122326
Start Date : 4/27/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	82	151	87	320	12	85	138	235	**90**	249	6	**345**	**172**	79	63	**314**
+15 mins.	**93**	184	75	352	**13**	75	121	209	65	222	7	294	118	**80**	53	251
+30 mins.	71	162	83	316	11	**98**	**170**	**279**	66	**253**	**10**	329	108	55	**73**	236
+45 mins.	77	**197**	**90**	**364**	6	78	142	226	74	212	5	291	134	72	58	264
Total Volume	323	694	335	1352	42	336	571	949	295	936	28	1259	532	286	247	1065
% App. Total	23.9	51.3	24.8		4.4	35.4	60.2		23.4	74.3	2.2		50	26.9	23.2	
PHF	.868	.881	.931	.929	.808	.857	.840	.850	.819	.925	.700	.912	.773	.894	.846	.848

Counts Unlimited, Inc.

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City of Palm Desert
Monterey Avenue
N/ Gerald Ford Drive
24 Hour Directional Volume Count

PLD001
Site Code: 051-22326

Start Time	27-Apr-22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		6	312			12	251				
12:15		8	358			8	260				
12:30		9	281			11	284				
12:45		6	303	29	1254	8	263	39	1058	68	2312
01:00		9	268			6	242				
01:15		12	317			9	**255**				
01:30		7	271			6	**278**				
01:45		4	317	32	1173	6	**275**	27	1050	59	2223
02:00		7	328			4	**254**				
02:15		4	333			7	252				
02:30		8	316			6	271				
02:45		7	301	26	1278	8	260	25	1037	51	2315
03:00		2	**338**			2	227				
03:15		7	**367**			7	241				
03:30		7	**320**			5	286				
03:45		6	**346**	22	1371	12	255	26	1009	48	2380
04:00		10	286			6	243				
04:15		11	340			16	248				
04:30		27	327			16	235				
04:45		25	306	73	1259	32	251	70	977	143	2236
05:00		20	289			30	224				
05:15		30	349			40	228				
05:30		35	331			52	233				
05:45		63	294	148	1263	71	215	193	900	341	2163
06:00		70	219			80	178				
06:15		68	236			93	206				
06:30		104	202			160	175				
06:45		98	185	340	842	177	158	510	717	850	1559
07:00		123	185			188	158				
07:15		134	205			186	131				
07:30		116	165			**286**	132				
07:45		187	139	560	694	**352**	123	1012	544	1572	1238
08:00		168	144			**236**	121				
08:15		172	132			**242**	103				
08:30		176	105			280	102				
08:45		185	108	701	489	274	81	1032	407	1733	896
09:00		191	152			212	64				
09:15		213	132			220	61				
09:30		198	103			246	51				
09:45		271	77	873	464	222	50	900	226	1773	690
10:00		227	77			225	44				
10:15		255	57			225	44				
10:30		223	61			266	36				
10:45		291	38	996	233	259	36	975	160	1971	393
11:00		**277**	34			240	40				
11:15		**303**	31			227	27				
11:30		**263**	31			257	29				
11:45		**332**	30	1175	126	239	17	963	113	2138	239
Total		4975	10446	4975	10446	5772	8198	5772	8198	10747	18644
Combined Total		15421		15421		13970		13970		29391	
AM Peak	-	11:00	-	-	-	07:30	-	-	-	-	-
Vol.	-	1175	-	-	-	1116	-	-	-	-	-
P.H.F.		0.885				0.793					
PM Peak	-	-	03:00	-	-	-	01:15	-	-	-	-
Vol.	-	-	1371	-	-	-	1062	-	-	-	-
P.H.F.			0.934				0.935				
Percentage		32.3%	67.7%			41.3%	58.7%				
ADT/AADT		ADT 29,391		AADT 29,391							

Counts Unlimited, Inc.

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City of Palm Desert
Gerald Ford Drive
W/ Portola Road
24 Hour Directional Volume Count

PLD002
Site Code: 051-22326

Start Time	27-Apr-22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	106			3	93				
12:15		6	102			1	82				
12:30		2	97			3	115				
12:45		2	87	12	392	4	114	11	404	23	796
01:00		2	106			1	100				
01:15		2	111			4	106				
01:30		3	102			1	**115**				
01:45		1	83	8	402	2	**125**	8	446	16	848
02:00		3	120			0	**119**				
02:15		1	107			2	**115**				
02:30		1	99			3	111				
02:45		3	125	8	451	1	106	6	451	14	902
03:00		4	**109**			2	114				
03:15		3	**140**			1	124				
03:30		2	**107**			4	107				
03:45		3	**131**	12	487	9	103	16	448	28	935
04:00		5	102			5	127				
04:15		2	110			10	96				
04:30		4	115			17	106				
04:45		9	89	20	416	23	99	55	428	75	844
05:00		7	133			13	91				
05:15		8	119			26	107				
05:30		12	120			35	92				
05:45		24	100	51	472	50	85	124	375	175	847
06:00		20	83			30	76				
06:15		27	82			39	62				
06:30		42	65			61	64				
06:45		59	58	148	288	97	59	227	261	375	549
07:00		70	63			115	45				
07:15		**78**	48			**112**	42				
07:30		**109**	37			**136**	40				
07:45		**103**	39	360	187	**157**	54	520	181	880	368
08:00		**97**	39			**156**	44				
08:15		69	42			90	36				
08:30		103	38			96	45				
08:45		102	30	371	149	121	36	463	161	834	310
09:00		84	26			96	36				
09:15		84	37			93	26				
09:30		82	24			114	26				
09:45		65	22	315	109	109	28	412	116	727	225
10:00		91	9			101	20				
10:15		74	15			90	14				
10:30		77	12			108	14				
10:45		89	8	331	44	106	7	405	55	736	99
11:00		80	15			88	9				
11:15		86	9			103	9				
11:30		91	11			92	5				
11:45		92	3	349	38	94	14	377	37	726	75
Total		1985	3435	1985	3435	2624	3363	2624	3363	4609	6798
Combined Total		5420		5420		5987		5987		11407	
AM Peak	-	07:15	-	-	-	07:15	-	-	-	-	-
Vol.	-	387	-	-	-	561	-	-	-	-	-
P.H.F.		0.888				0.893					
PM Peak	-	-	03:00	-	-	-	01:30	-	-	-	-
Vol.	-	-	487	-	-	-	474	-	-	-	-
P.H.F.			0.870				0.948				
Percentage		36.6%	63.4%			43.8%	56.2%				
ADT/AADT		ADT 11,407		AADT 11,407							

Counts Unlimited, Inc.

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City of Palm Desert
Gerald Ford Drive
W/ Cook Street
24 Hour Directional Volume Count

PLD003
Site Code: 051-22326

Start Time	27-Apr-22 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		2	102			1	118				
12:15		2	149			3	132				
12:30		3	115			5	119				
12:45		3	104	10	470	2	145	11	514	21	984
01:00		1	132			3	100				
01:15		2	143			4	139				
01:30		3	120			3	132				
01:45		2	125	8	520	4	148	14	519	22	1039
02:00		4	156			0	130				
02:15		0	118			2	129				
02:30		2	152			3	132				
02:45		4	145	10	571	1	151	6	542	16	1113
03:00		3	167			1	126				
03:15		3	179			1	**146**				
03:30		3	149			4	**143**				
03:45		4	166	13	661	9	**147**	15	562	28	1223
04:00		7	186			8	**143**				
04:15		3	148			10	122				
04:30		6	**200**			19	126				
04:45		5	**142**	21	676	36	103	73	494	94	1170
05:00		7	**181**			11	106				
05:15		11	**179**			33	147				
05:30		17	148			41	112				
05:45		29	134	64	642	67	113	152	478	216	1120
06:00		25	122			50	102				
06:15		32	112			71	96				
06:30		34	92			118	77				
06:45		74	253	165	579	172	66	411	341	576	920
07:00		87	102			152	61				
07:15		72	73			**166**	41				
07:30		96	60			**177**	53				
07:45		133	76	388	311	**218**	59	713	214	1101	525
08:00		102	61			**168**	40				
08:15		87	58			120	49				
08:30		114	67			162	49				
08:45		118	37	421	223	154	34	604	172	1025	395
09:00		91	58			128	37				
09:15		98	45			115	37				
09:30		99	43			142	30				
09:45		97	36	385	182	158	24	543	128	928	310
10:00		96	21			129	25				
10:15		118	22			140	24				
10:30		94	24			128	14				
10:45		**115**	15	423	82	134	8	531	71	954	153
11:00		**115**	20			115	15				
11:15		**106**	15			122	15				
11:30		**116**	12			146	11				
11:45		90	8	427	55	131	14	514	55	941	110
Total		2335	4972	2335	4972	3587	4090	3587	4090	5922	9062
Combined Total		7307		7307		7677		7677		14984	
AM Peak	-	10:45	-	-	-	07:15	-	-	-	-	-
Vol.	-	452	-	-	-	729	-	-	-	-	-
P.H.F.		0.974				0.836					
PM Peak	-	-	04:30	-	-	-	03:15	-	-	-	-
Vol.	-	-	702	-	-	-	579	-	-	-	-
P.H.F.			0.878				0.985				
Percentage		32.0%	68.0%			46.7%	53.3%				
ADT/AADT		ADT 14,984		AADT 14,984							

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City of Palm Desert
Portola Road
S/ Gerald Ford Drive
24 Hour Directional Volume Count

PLD004
Site Code: 051-22326

Start Time	27-Apr-22 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		5	93			3	103				
12:15		6	110			5	92				
12:30		2	102			2	95				
12:45		6	90	19	395	2	**105**	12	395	31	790
01:00		2	114			2	**101**				
01:15		0	93			0	**113**				
01:30		2	97			2	**100**				
01:45		1	110	5	414	1	83	5	397	10	811
02:00		1	134			1	92				
02:15		2	91			2	99				
02:30		0	107			0	79				
02:45		3	105	6	437	0	91	3	361	9	798
03:00		4	104			1	86				
03:15		3	**123**			4	91				
03:30		3	**104**			4	85				
03:45		4	**120**	14	451	5	99	14	361	28	812
04:00		3	**127**			4	102				
04:15		2	118			1	94				
04:30		10	108			8	85				
04:45		14	101	29	454	11	93	24	374	53	828
05:00		4	103			7	85				
05:15		8	116			14	82				
05:30		27	96			11	87				
05:45		22	79	61	394	14	85	46	339	107	733
06:00		31	65			39	54				
06:15		30	79			25	54				
06:30		41	62			36	56				
06:45		49	59	151	265	52	64	152	228	303	493
07:00		55	51			64	48				
07:15		55	52			**89**	41				
07:30		**90**	42			**119**	44				
07:45		**113**	54	313	199	**115**	40	387	173	700	372
08:00		**107**	37			**79**	35				
08:15		**109**	44			83	35				
08:30		71	36			86	37				
08:45		95	23	382	140	92	31	340	138	722	278
09:00		64	24			87	32				
09:15		103	36			76	23				
09:30		88	29			67	13				
09:45		96	25	351	114	69	22	299	90	650	204
10:00		74	21			67	18				
10:15		69	15			80	19				
10:30		85	14			76	17				
10:45		104	12	332	62	79	12	302	66	634	128
11:00		89	10			92	9				
11:15		90	5			79	4				
11:30		81	6			87	7				
11:45		103	3	363	24	85	5	343	25	706	49
Total		2026	3349	2026	3349	1927	2947	1927	2947	3953	6296
Combined Total		5375		5375		4874		4874		10249	
AM Peak	-	07:30	-	-	-	07:15	-	-	-	-	-
Vol.	-	419	-	-	-	402	-	-	-	-	-
P.H.F.		0.927				0.845					
PM Peak	-	-	03:15	-	-	-	00:45	-	-	-	-
Vol.	-	-	474	-	-	-	419	-	-	-	-
P.H.F.			0.933				0.927				
Percentage		37.7%	62.3%			39.5%	60.5%				
ADT/AADT		ADT 10,249		AADT 10,249							

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City of Palm Desert
Frank Sinatra Drive
W/ Portola Avenue
24 Hour Directional Volume Count

PLDFSWPO
Site Code: 051-22144

Start Time	3/9/2022 Wed	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		4	96			4	127				
12:15		4	44			5	114				
12:30		4	107			3	121				
12:45		7	100	19	347	4	128	16	490	35	837
01:00		7	120			0	130				
01:15		2	126			5	109				
01:30		3	139			1	141				
01:45		1	139	13	524	2	139	8	519	21	1043
02:00		2	127			1	124				
02:15		2	124			0	146				
02:30		3	175			2	127				
02:45		7	176	14	602	1	122	4	519	18	1121
03:00		1	178			4	128				
03:15		3	141			0	127				
03:30		1	168			2	123				
03:45		2	172	7	659	5	**137**	11	515	18	1174
04:00		2	143			5	**153**				
04:15		4	**168**			4	**142**				
04:30		9	**179**			16	**127**				
04:45		11	**133**	26	623	21	107	46	529	72	1152
05:00		6	**196**			14	108				
05:15		11	167			31	135				
05:30		12	146			40	128				
05:45		14	129	43	638	47	106	132	477	175	1115
06:00		26	101			55	69				
06:15		30	73			71	93				
06:30		46	80			95	80				
06:45		44	53	146	307	162	73	383	315	529	622
07:00		63	70			114	57				
07:15		75	54			154	57				
07:30		102	71			**194**	39				
07:45		131	52	371	247	**197**	65	659	218	1030	465
08:00		105	64			**172**	42				
08:15		99	43			**171**	24				
08:30		110	55			175	31				
08:45		96	42	410	204	149	30	667	127	1077	331
09:00		89	55			137	23				
09:15		100	49			120	26				
09:30		116	41			136	38				
09:45		102	36	407	181	139	37	532	124	939	305
10:00		117	24			146	17				
10:15		82	27			139	18				
10:30		102	30			126	11				
10:45		89	17	390	98	133	17	544	63	934	161
11:00		**128**	15			130	10				
11:15		**95**	9			108	8				
11:30		**122**	10			131	13				
11:45		**109**	13	454	47	118	3	487	34	941	81
Total		2300	4477	2300	4477	3489	3930	3489	3930	5789	8407
Combined Total		6777		6777		7419		7419		14196	
AM Peak	-	11:00	-	-	-	07:30	-	-	-	-	-
Vol.	-	454	-	-	-	734	-	-	-	-	-
P.H.F.		0.887				0.931					
PM Peak	-	-	04:15	-	-	-	03:45	-	-	-	-
Vol.	-	-	676	-	-	-	559	-	-	-	-
P.H.F.			0.862				0.913				
Percentage		33.9%	66.1%			47.0%	53.0%				
ADT/AADT		ADT 14,196		AADT 14,196							

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City of Palm Desert
Portila Avenue
S/ Frank Sinatra Drive
24 Hour Directional Volume Count

PLDPOSFS
Site Code: 051-22144

Start Time	3/9/2022 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		6	140			4	97				
12:15		9	177			2	99				
12:30		4	146			6	107				
12:45		3	131	22	594	3	114	15	417	37	1011
01:00		1	134			1	119				
01:15		4	158			9	122				
01:30		2	195			3	123				
01:45		7	185	14	672	3	136	16	500	30	1172
02:00		1	199			1	**120**				
02:15		2	198			5	**148**				
02:30		1	199			2	**151**				
02:45		2	240	6	836	2	**152**	10	571	16	1407
03:00		3	243			1	108				
03:15		5	**220**			1	134				
03:30		2	**259**			4	114				
03:45		2	**229**	12	951	6	138	12	494	24	1445
04:00		5	**271**			7	112				
04:15		5	197			8	138				
04:30		11	188			13	119				
04:45		14	155	35	811	21	131	49	500	84	1311
05:00		11	194			9	118				
05:15		21	186			8	123				
05:30		17	153			12	98				
05:45		26	122	75	655	26	88	55	427	130	1082
06:00		35	100			31	71				
06:15		39	83			55	67				
06:30		59	84			51	65				
06:45		82	76	215	343	67	61	204	264	419	607
07:00		59	80			95	45				
07:15		83	70			104	68				
07:30		111	57			**141**	42				
07:45		126	55	379	262	**186**	38	526	193	905	455
08:00		180	57			**127**	48				
08:15		157	43			**117**	39				
08:30		149	41			124	27				
08:45		157	40	643	181	127	27	495	141	1138	322
09:00		128	40			105	41				
09:15		147	30			103	20				
09:30		108	39			92	25				
09:45		136	35	519	144	112	17	412	103	931	247
10:00		136	19			103	28				
10:15		170	19			99	19				
10:30		132	23			118	17				
10:45		149	16	587	77	95	19	415	83	1002	160
11:00		**167**	13			102	12				
11:15		**149**	11			103	11				
11:30		**167**	7			114	5				
11:45		**190**	5	673	36	105	8	424	36	1097	72
Total		3180	5562	3180	5562	2633	3729	2633	3729	5813	9291
Combined Total		8742		8742		6362		6362		15104	
AM Peak	-	11:00	-	-	-	07:30	-	-	-	-	-
Vol.	-	673	-	-	-	571	-	-	-	-	-
P.H.F.		0.886				0.767					
PM Peak	-	-	03:15	-	-	-	02:00	-	-	-	-
Vol.	-	-	979	-	-	-	571	-	-	-	-
P.H.F.			0.903				0.939				
Percentage		36.4%	63.6%			41.4%	58.6%				

ADT/AADT	ADT 15,104	AADT 15,104

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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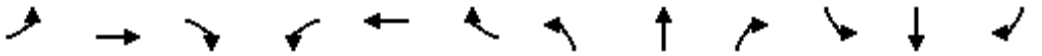
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	240	133	96	352	59	95	559	21	38	979	93
Future Volume (vph)	85	240	133	96	352	59	95	559	21	38	979	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	98	276	153	110	405	68	109	643	24	44	1125	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	276	153	110	405	68	109	667	0	44	1125	107
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	15.0	32.0	32.0	17.0	34.0	34.0	17.0	59.0		12.0	54.0	54.0
Total Split (%)	12.5%	26.7%	26.7%	14.2%	28.3%	28.3%	14.2%	49.2%		10.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	240	133	96	352	59	95	559	21	38	979	93
Future Volume (veh/h)	85	240	133	96	352	59	95	559	21	38	979	93
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	276	153	110	405	68	109	643	24	44	1125	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	508	224	167	524	231	164	3167	118	111	3122	
Arrive On Green	0.04	0.14	0.14	0.02	0.05	0.05	0.05	0.63	0.63	0.03	0.61	0.00
Sat Flow, veh/h	3456	3554	1568	3456	3554	1569	3456	5052	188	3456	5106	1585
Grp Volume(v), veh/h	98	276	153	110	405	68	109	432	235	44	1125	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1568	1728	1777	1569	1728	1702	1836	1728	1702	1585
Q Serve(g_s), s	3.3	8.7	11.1	3.8	13.5	5.0	3.7	6.5	6.6	1.5	13.2	0.0
Cycle Q Clear(g_c), s	3.3	8.7	11.1	3.8	13.5	5.0	3.7	6.5	6.6	1.5	13.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	151	508	224	167	524	231	164	2134	1151	111	3122	
V/C Ratio(X)	0.65	0.54	0.68	0.66	0.77	0.29	0.66	0.20	0.20	0.40	0.36	
Avail Cap(c_a), veh/h	302	814	359	360	874	386	360	2134	1151	216	3122	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.5	47.8	48.8	58.1	55.1	51.1	56.2	9.6	9.6	56.9	11.6	0.0
Incr Delay (d2), s/veh	4.7	0.9	3.6	4.3	2.4	0.7	4.5	0.2	0.4	2.3	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	1.5	3.8	4.4	1.7	6.6	2.0	1.7	2.2	2.4	0.7	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	48.7	52.5	62.4	57.5	51.7	60.7	9.8	10.0	59.2	11.9	0.0
LnGrp LOS	E	D	D	E	E	D	E	A	A	E	B	
Approach Vol, veh/h		527			583			776			1169	A
Approach Delay, s/veh		52.1			57.8			17.0			13.7	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	79.7	10.3	21.6	10.2	77.9	9.7	22.2
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	54.5	12.5	27.5	12.5	49.5	10.5	29.5
Max Q Clear Time (g_c+I1), s	3.5	8.6	5.8	13.1	5.7	15.2	5.3	15.5
Green Ext Time (p_c), s	0.0	4.0	0.1	1.7	0.1	8.2	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

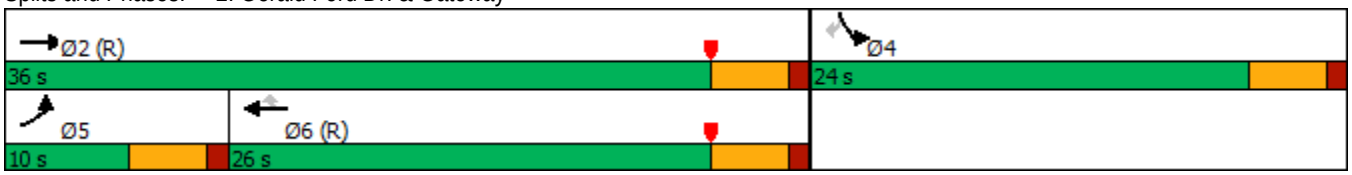
Notes

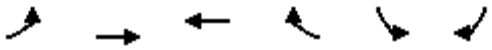
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	23	276	491	83	109	27
Future Volume (vph)	23	276	491	83	109	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	26	310	552	93	122	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	26	310	552	93	122	30
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	36.0	26.0	26.0	24.0	24.0
Total Split (%)	16.7%	60.0%	43.3%	43.3%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Gerald Ford Dr. & Gateway

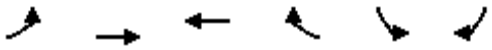




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	276	491	83	109	27
Future Volume (veh/h)	23	276	491	83	109	27
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	310	552	93	122	30
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	52	1866	2148	663	579	515
Arrive On Green	0.03	0.52	0.42	0.42	0.32	0.32
Sat Flow, veh/h	1781	3647	5274	1576	1781	1585
Grp Volume(v), veh/h	26	310	552	93	122	30
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1576	1781	1585
Q Serve(g_s), s	0.9	2.7	4.2	2.2	3.0	0.8
Cycle Q Clear(g_c), s	0.9	2.7	4.2	2.2	3.0	0.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	52	1866	2148	663	579	515
V/C Ratio(X)	0.50	0.17	0.26	0.14	0.21	0.06
Avail Cap(c_a), veh/h	163	1866	2148	663	579	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	7.4	11.3	10.7	14.7	13.9
Incr Delay (d2), s/veh	6.3	0.2	0.3	0.4	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	1.3	0.7	1.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	7.6	11.6	11.1	15.5	14.1
LnGrp LOS	D	A	B	B	B	B
Approach Vol, veh/h		336	645		152	
Approach Delay, s/veh		9.7	11.5		15.2	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.0		24.0	6.3	29.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		31.5		19.5	5.5	21.5
Max Q Clear Time (g_c+I1), s		4.7		5.0	2.9	6.2
Green Ext Time (p_c), s		1.7		0.3	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	329	539	22	45	40
Future Volume (vph)	16	329	539	22	45	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190			110	0	50
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Link Speed (mph)		50	50		30	
Link Distance (ft)		2201	915		430	
Travel Time (s)		30.0	12.5		9.8	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	18	370	606	25	51	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	370	606	25	51	45
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	329	539	22	45	40
Future Vol, veh/h	16	329	539	22	45	40
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	190	-	-	110	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	370	606	25	51	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	636	0	-	0	837	313
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	5.34	-	-	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	3.12	-	-	-	3.67	3.92
Pot Cap-1 Maneuver	584	-	-	-	338	583
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	761	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	581	-	-	-	324	577
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	412	-
Stage 2	-	-	-	-	757	-

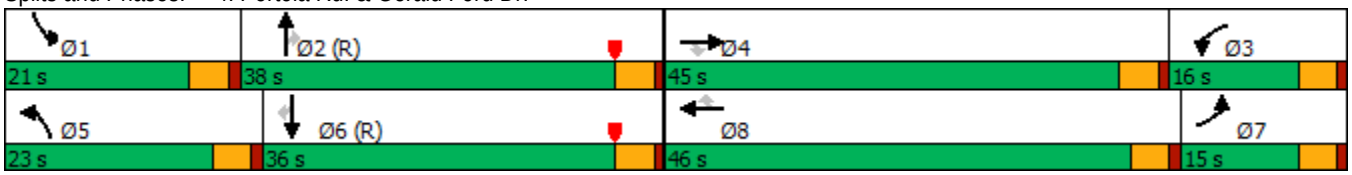
Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15.2
HCM LOS			C

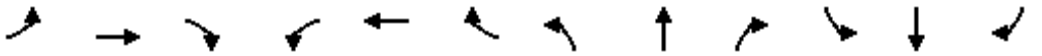
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	581	-	-	-	324	577
HCM Lane V/C Ratio	0.031	-	-	-	0.156	0.078
HCM Control Delay (s)	11.4	-	-	-	18.2	11.8
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	227	154	33	461	161	98	228	39	75	215	2
Future Volume (vph)	6	227	154	33	461	161	98	228	39	75	215	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	7	267	181	39	542	189	115	268	46	88	253	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	267	181	39	542	189	115	268	46	88	253	2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	45.0	45.0	16.0	46.0	46.0	23.0	38.0	38.0	21.0	36.0	36.0
Total Split (%)	12.5%	37.5%	37.5%	13.3%	38.3%	38.3%	19.2%	31.7%	31.7%	17.5%	30.0%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	227	154	33	461	161	98	228	39	75	215	2
Future Volume (veh/h)	6	227	154	33	461	161	98	228	39	75	215	2
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	267	181	39	542	0	115	268	46	88	253	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	476	210	105	749		171	3294	1020	140	3249	
Arrive On Green	0.02	0.13	0.13	0.03	0.15	0.00	0.10	1.00	1.00	0.04	0.64	0.00
Sat Flow, veh/h	1781	3554	1567	3456	5106	1585	3456	5106	1581	3456	5106	1585
Grp Volume(v), veh/h	7	267	181	39	542	0	115	268	46	88	253	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1567	1728	1702	1585	1728	1702	1581	1728	1702	1585
Q Serve(g_s), s	0.5	8.4	11.6	1.3	12.2	0.0	3.9	0.0	0.0	3.0	2.3	0.0
Cycle Q Clear(g_c), s	0.5	8.4	11.6	1.3	12.2	0.0	3.9	0.0	0.0	3.0	2.3	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	31	476	210	105	749		171	3294	1020	140	3249	
V/C Ratio(X)	0.22	0.56	0.86	0.37	0.72		0.67	0.08	0.05	0.63	0.08	
Avail Cap(c_a), veh/h	156	1199	529	331	1766		533	3294	1020	475	3249	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	48.7	37.3	57.1	48.9	0.0	53.1	0.0	0.0	56.7	8.4	0.0
Incr Delay (d2), s/veh	3.6	1.0	10.0	2.1	1.3	0.0	4.5	0.0	0.1	4.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.7	4.9	0.6	5.1	0.0	1.7	0.0	0.0	1.4	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	49.7	47.3	59.2	50.2	0.0	57.6	0.0	0.1	61.2	8.4	0.0
LnGrp LOS	E	D	D	E	D		E	A	A	E	A	
Approach Vol, veh/h		455			581	A		429			341	A
Approach Delay, s/veh		48.9			50.8			15.5			22.0	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	81.9	8.1	20.6	10.4	80.8	6.6	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	16.5	33.5	11.5	40.5	18.5	31.5	10.5	41.5
Max Q Clear Time (g_c+I1), s	5.0	2.0	3.3	13.6	5.9	4.3	2.5	14.2
Green Ext Time (p_c), s	0.1	1.7	0.0	2.1	0.2	1.4	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	36.5
HCM 6th LOS	D

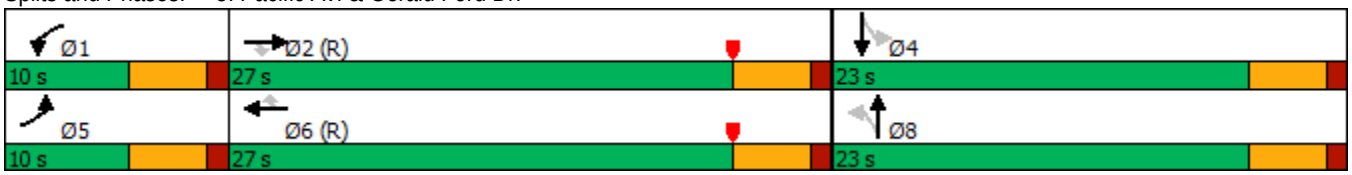
Notes

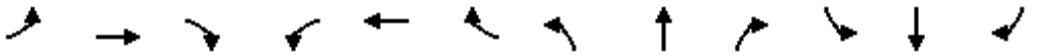
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	335	5	10	635	21	5	6	3	36	3	15
Future Volume (vph)	1	335	5	10	635	21	5	6	3	36	3	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	1	404	6	12	765	25	6	7	4	43	4	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	404	6	12	765	25	6	11	0	43	22	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0		23.0	23.0	
Total Split (%)	16.7%	45.0%	45.0%	16.7%	45.0%	45.0%	38.3%	38.3%		38.3%	38.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	335	5	10	635	21	5	6	3	36	3	15
Future Volume (veh/h)	1	335	5	10	635	21	5	6	3	36	3	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	404	6	12	765	25	6	7	4	43	4	18
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	2306	713	27	2376	735	535	696	362	547	548	486
Arrive On Green	0.00	0.15	0.15	0.02	0.47	0.47	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1580	1781	5106	1580	1383	2256	1173	1397	1777	1577
Grp Volume(v), veh/h	1	404	6	12	765	25	6	5	6	43	4	18
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1580	1383	1777	1652	1397	1777	1577
Q Serve(g_s), s	0.0	4.1	0.2	0.4	5.7	0.5	0.2	0.1	0.1	1.3	0.1	0.5
Cycle Q Clear(g_c), s	0.0	4.1	0.2	0.4	5.7	0.5	0.7	0.1	0.1	1.5	0.1	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	3	2306	713	27	2376	735	535	548	509	547	548	486
V/C Ratio(X)	0.34	0.18	0.01	0.45	0.32	0.03	0.01	0.01	0.01	0.08	0.01	0.04
Avail Cap(c_a), veh/h	163	2306	713	163	2376	735	535	548	509	547	548	486
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	15.8	14.1	29.3	10.1	8.7	14.7	14.4	14.4	14.9	14.4	14.5
Incr Delay (d2), s/veh	50.6	0.1	0.0	11.1	0.4	0.1	0.0	0.0	0.0	0.3	0.0	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	0.1	1.3	0.1	0.2	1.8	0.2	0.1	0.1	0.1	0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.6	15.9	14.1	40.4	10.4	8.8	14.8	14.4	14.4	15.2	14.4	14.7
LnGrp LOS	F	B	B	D	B	A	B	B	B	B	B	B
Approach Vol, veh/h		411			802			17			65	
Approach Delay, s/veh		16.0			10.8			14.6			15.0	
Approach LOS		B			B			B			B	

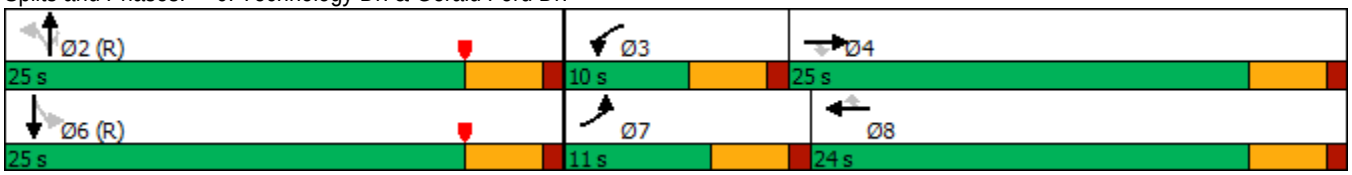
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	31.6		23.0	4.6	32.4		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		18.5	5.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	2.4	6.1		3.5	2.0	7.7		2.7				
Green Ext Time (p_c), s	0.0	2.1		0.1	0.0	4.4		0.0				

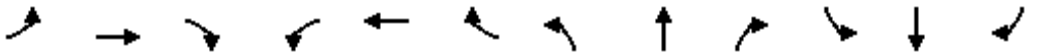
Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	316	27	14	618	42	16	22	19	60	17	32
Future Volume (vph)	31	316	27	14	618	42	16	22	19	60	17	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	37	381	33	17	745	51	19	27	23	72	20	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	381	33	17	745	51	19	27	23	72	59	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	11.0	25.0	25.0	10.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	18.3%	41.7%	41.7%	16.7%	40.0%	40.0%	41.7%	41.7%	41.7%	41.7%	41.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	316	27	14	618	42	16	22	19	60	17	32
Future Volume (veh/h)	31	316	27	14	618	42	16	22	19	60	17	32
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	381	33	17	745	51	19	27	23	72	20	39
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1240	381	37	1150	353	782	957	808	802	289	564
Arrive On Green	0.04	0.24	0.24	0.03	0.30	0.30	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	5106	1569	1781	5106	1567	1340	1870	1580	1351	565	1103
Grp Volume(v), veh/h	37	381	33	17	745	51	19	27	23	72	0	59
Grp Sat Flow(s),veh/h/ln	1781	1702	1569	1781	1702	1567	1340	1870	1580	1351	0	1668
Q Serve(g_s), s	1.2	3.7	1.0	0.6	7.6	1.4	0.4	0.4	0.4	1.7	0.0	1.1
Cycle Q Clear(g_c), s	1.2	3.7	1.0	0.6	7.6	1.4	1.5	0.4	0.4	2.1	0.0	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	68	1240	381	37	1150	353	782	957	808	802	0	853
V/C Ratio(X)	0.54	0.31	0.09	0.46	0.65	0.14	0.02	0.03	0.03	0.09	0.00	0.07
Avail Cap(c_a), veh/h	193	1745	536	163	1659	509	782	957	808	802	0	853
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	18.6	17.6	28.9	19.0	16.8	7.8	7.3	7.3	7.8	0.0	7.4
Incr Delay (d2), s/veh	6.5	0.1	0.1	7.7	0.5	0.2	0.1	0.1	0.1	0.2	0.0	0.2
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	1.3	0.3	0.3	2.5	0.5	0.1	0.2	0.1	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	18.7	17.7	36.5	19.5	16.9	7.9	7.3	7.3	8.0	0.0	7.6
LnGrp LOS	C	B	B	D	B	B	A	A	A	A	A	A
Approach Vol, veh/h		451			813			69			131	
Approach Delay, s/veh		20.0			19.7			7.5			7.8	
Approach LOS		B			B			A			A	

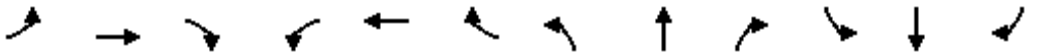
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		35.2	5.7	19.1		35.2	6.8	18.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	5.5	20.5		20.5	6.5	19.5				
Max Q Clear Time (g_c+I1), s		3.5	2.6	5.7		4.1	3.2	9.6				
Green Ext Time (p_c), s		0.2	0.0	2.1		0.4	0.0	3.5				

Intersection Summary												
HCM 6th Ctrl Delay			18.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	99	93	29	222	114	115	495	28	166	1298	346
Future Volume (vph)	226	99	93	29	222	114	115	495	28	166	1298	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	269	118	111	35	264	136	137	589	33	198	1545	412
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	118	111	35	264	136	137	589	33	198	1545	412
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.0	36.0		10.0	24.0	24.0	15.0	55.0	55.0	19.0	59.0	59.0
Total Split (%)	18.3%	30.0%		8.3%	20.0%	20.0%	12.5%	45.8%	45.8%	15.8%	49.2%	49.2%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	99	93	29	222	114	115	495	28	166	1298	346
Future Volume (veh/h)	226	99	93	29	222	114	115	495	28	166	1298	346
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	269	118	0	35	264	136	137	589	33	198	1545	412
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	656		99	413	182	194	2868	888	260	2966	918
Arrive On Green	0.10	0.18	0.00	0.03	0.12	0.12	0.06	0.56	0.56	0.08	0.58	0.58
Sat Flow, veh/h	3456	3554	1585	3456	3554	1565	3456	5106	1581	3456	5106	1581
Grp Volume(v), veh/h	269	118	0	35	264	136	137	589	33	198	1545	412
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1565	1728	1702	1581	1728	1702	1581
Q Serve(g_s), s	9.1	3.4	0.0	1.2	8.5	10.1	4.7	6.9	1.1	6.7	21.8	17.7
Cycle Q Clear(g_c), s	9.1	3.4	0.0	1.2	8.5	10.1	4.7	6.9	1.1	6.7	21.8	17.7
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	335	656		99	413	182	194	2868	888	260	2966	918
V/C Ratio(X)	0.80	0.18		0.35	0.64	0.75	0.71	0.21	0.04	0.76	0.52	0.45
Avail Cap(c_a), veh/h	504	933		158	577	254	302	2868	888	418	2966	918
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)	0.98	0.98	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.3	0.0	57.2	50.6	51.3	55.7	13.0	11.8	54.4	15.1	14.3
Incr Delay (d2), s/veh	5.5	0.1	0.0	2.1	1.6	7.4	4.7	0.2	0.1	4.6	0.7	1.6
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	4.2	1.5	0.0	0.5	3.8	4.2	2.1	2.4	0.4	3.0	7.5	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	41.4	0.0	59.3	52.3	58.7	60.4	13.2	11.8	59.1	15.8	15.8
LnGrp LOS	E	D		E	D	E	E	B	B	E	B	B
Approach Vol, veh/h		387	A		435			759			2155	
Approach Delay, s/veh		53.3			54.8			21.6			19.8	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	71.9	7.9	26.6	11.2	74.2	16.1	18.5
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	14.5	50.5	5.5	31.5	10.5	54.5	17.5	19.5
Max Q Clear Time (g_c+I1), s	8.7	8.9	3.2	5.4	6.7	23.8	11.1	12.1
Green Ext Time (p_c), s	0.3	3.9	0.0	0.6	0.1	14.6	0.5	1.1

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

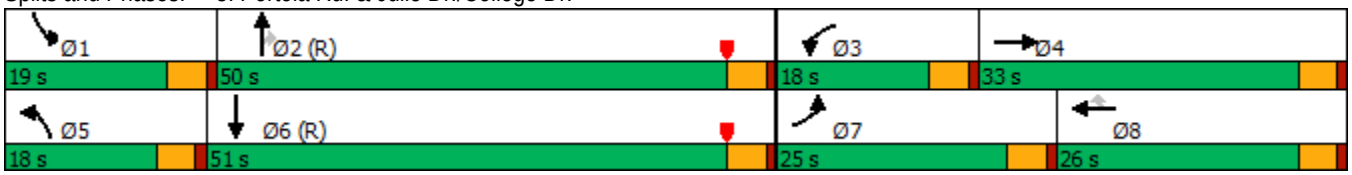
Notes

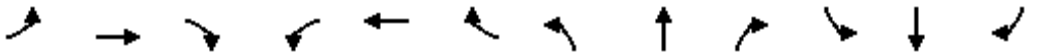
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	17	17	5	5	7	6	397	17	9	364	29
Future Volume (vph)	27	17	17	5	5	7	6	397	17	9	364	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1533			463			3682			1684	
Travel Time (s)		34.8			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	30	19	19	6	6	8	7	446	19	10	409	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	38	0	6	6	8	7	446	19	10	442	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	25.0	33.0		18.0	26.0	26.0	18.0	50.0	50.0	19.0	51.0	
Total Split (%)	20.8%	27.5%		15.0%	21.7%	21.7%	15.0%	41.7%	41.7%	15.8%	42.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	17	17	5	5	7	6	397	17	9	364	29
Future Volume (veh/h)	27	17	17	5	5	7	6	397	17	9	364	29
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		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	19	19	6	6	8	7	446	19	10	409	33
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	2	2	2	2	2	2
Cap, veh/h	47	61	61	13	100	82	15	3872	1198	21	3670	292
Arrive On Green	0.03	0.07	0.07	0.01	0.05	0.05	0.01	0.76	0.76	0.02	1.00	1.00
Sat Flow, veh/h	1781	848	848	1781	1870	1541	1781	5106	1580	1781	4820	384
Grp Volume(v), veh/h	30	0	38	6	6	8	7	446	19	10	287	155
Grp Sat Flow(s),veh/h/ln	1781	0	1696	1781	1870	1541	1781	1702	1580	1781	1702	1800
Q Serve(g_s), s	2.0	0.0	2.6	0.4	0.4	0.6	0.5	2.8	0.4	0.7	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	2.6	0.4	0.4	0.6	0.5	2.8	0.4	0.7	0.0	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	47	0	123	13	100	82	15	3872	1198	21	2592	1370
V/C Ratio(X)	0.64	0.00	0.31	0.45	0.06	0.10	0.45	0.12	0.02	0.48	0.11	0.11
Avail Cap(c_a), veh/h	304	0	403	200	335	276	200	3872	1198	215	2592	1370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98
Uniform Delay (d), s/veh	57.9	0.0	52.8	59.3	53.9	54.0	59.2	3.8	3.5	58.2	0.0	0.0
Incr Delay (d2), s/veh	13.6	0.0	1.4	21.4	0.2	0.5	19.2	0.1	0.0	15.4	0.1	0.2
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	1.1	0.0	1.1	0.3	0.2	0.2	0.3	0.7	0.1	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	0.0	54.2	80.7	54.2	54.5	78.4	3.9	3.6	73.6	0.1	0.2
LnGrp LOS	E	A	D	F	D	D	E	A	A	E	A	A
Approach Vol, veh/h		68			20			472			452	
Approach Delay, s/veh		61.8			62.3			5.0			1.7	
Approach LOS		E			E			A			A	

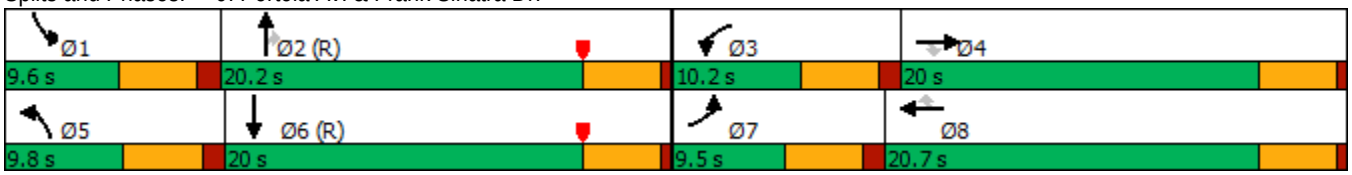
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	95.5	5.4	13.2	5.5	95.9	7.7	10.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.5	45.5	13.5	28.5	13.5	46.5	20.5	21.5
Max Q Clear Time (g_c+I1), s	2.7	4.8	2.4	4.6	2.5	2.0	4.0	2.6
Green Ext Time (p_c), s	0.0	2.8	0.0	0.1	0.0	2.5	0.0	0.0

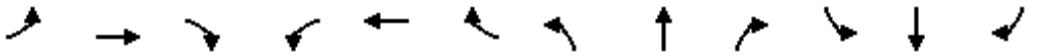
Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	267	115	130	597	18	119	385	65	33	333	20
Future Volume (vph)	17	267	115	130	597	18	119	385	65	33	333	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	19	303	131	148	678	20	135	438	74	38	378	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	303	131	148	678	20	135	438	74	38	401	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.5	20.0	20.0	10.2	20.7	20.7	9.8	20.2	20.2	9.6	20.0	
Total Split (%)	15.8%	33.3%	33.3%	17.0%	34.5%	34.5%	16.3%	33.7%	33.7%	16.0%	33.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	267	115	130	597	18	119	385	65	33	333	20
Future Volume (veh/h)	17	267	115	130	597	18	119	385	65	33	333	20
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	303	131	148	678	20	135	438	74	38	378	23
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	596	263	169	853	378	157	2118	655	70	1800	108
Arrive On Green	0.02	0.17	0.17	0.09	0.24	0.24	0.09	0.41	0.41	0.04	0.37	0.37
Sat Flow, veh/h	1781	3554	1571	1781	3554	1575	1781	5106	1579	1781	4923	296
Grp Volume(v), veh/h	19	303	131	148	678	20	135	438	74	38	260	141
Grp Sat Flow(s),veh/h/ln	1781	1777	1571	1781	1777	1575	1781	1702	1579	1781	1702	1816
Q Serve(g_s), s	0.6	4.7	4.5	4.9	10.8	0.6	4.5	3.3	1.7	1.3	3.1	3.2
Cycle Q Clear(g_c), s	0.6	4.7	4.5	4.9	10.8	0.6	4.5	3.3	1.7	1.3	3.1	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	40	596	263	169	853	378	157	2118	655	70	1245	664
V/C Ratio(X)	0.47	0.51	0.50	0.87	0.79	0.05	0.86	0.21	0.11	0.55	0.21	0.21
Avail Cap(c_a), veh/h	148	948	419	169	989	438	157	2118	655	151	1245	664
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	29.0	22.7	22.7	26.8	21.4	17.5	27.0	11.2	10.8	28.3	13.1	13.1
Incr Delay (d2), s/veh	8.3	0.7	1.5	36.3	4.0	0.1	34.8	0.2	0.3	6.5	0.4	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	0.3	1.7	1.5	3.5	4.2	0.2	3.2	1.0	0.5	0.6	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	23.4	24.1	63.1	25.4	17.6	61.8	11.5	11.1	34.8	13.5	13.8
LnGrp LOS	D	C	C	E	C	B	E	B	B	C	B	B
Approach Vol, veh/h		453			846			647			439	
Approach Delay, s/veh		24.2			31.8			21.9			15.4	
Approach LOS		C			C			C			B	

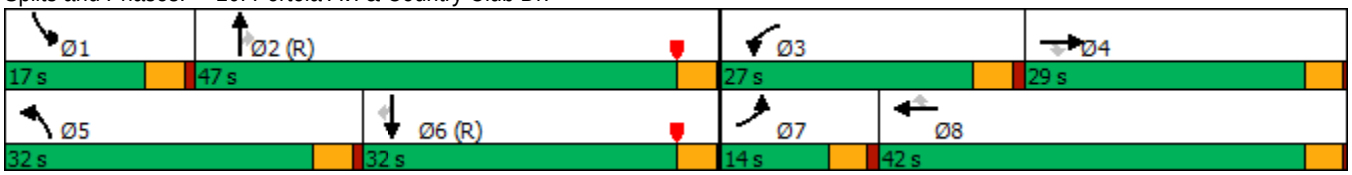
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	28.9	10.2	14.1	9.8	25.9	5.9	18.4
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.1	16.2	5.7	16.0	5.3	16.0	5.0	16.7
Max Q Clear Time (g_c+I1), s	3.3	5.3	6.9	6.7	6.5	5.2	2.6	12.8
Green Ext Time (p_c), s	0.0	2.0	0.0	1.4	0.0	1.5	0.0	1.5

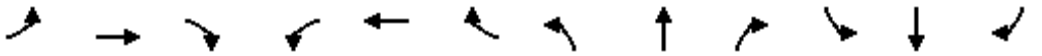
Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	358	151	160	685	82	198	407	134	65	417	40
Future Volume (vph)	40	358	151	160	685	82	198	407	134	65	417	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	47	421	178	188	806	96	233	479	158	76	491	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	421	178	188	806	96	233	479	158	76	491	47
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	14.0	29.0	29.0	27.0	42.0	42.0	32.0	47.0	47.0	17.0	32.0	32.0
Total Split (%)	11.7%	24.2%	24.2%	22.5%	35.0%	35.0%	26.7%	39.2%	39.2%	14.2%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	358	151	160	685	82	198	407	134	65	417	40
Future Volume (veh/h)	40	358	151	160	685	82	198	407	134	65	417	40
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	421	178	188	806	96	233	479	158	76	491	47
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	624	276	218	937	416	264	1798	800	97	1465	651
Arrive On Green	0.03	0.18	0.18	0.12	0.26	0.26	0.15	0.51	0.51	0.05	0.41	0.41
Sat Flow, veh/h	1781	3554	1572	1781	3554	1576	1781	3554	1580	1781	3554	1579
Grp Volume(v), veh/h	47	421	178	188	806	96	233	479	158	76	491	47
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1777	1576	1781	1777	1580	1781	1777	1579
Q Serve(g_s), s	3.1	13.3	12.6	12.4	25.9	5.7	15.4	9.2	6.6	5.1	11.3	2.2
Cycle Q Clear(g_c), s	3.1	13.3	12.6	12.4	25.9	5.7	15.4	9.2	6.6	5.1	11.3	2.2
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	61	624	276	218	937	416	264	1798	800	97	1465	651
V/C Ratio(X)	0.78	0.68	0.65	0.86	0.86	0.23	0.88	0.27	0.20	0.78	0.34	0.07
Avail Cap(c_a), veh/h	141	740	327	334	1125	499	408	1798	800	186	1465	651
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	57.5	46.3	46.0	51.7	42.1	34.6	50.1	16.9	16.3	56.0	24.1	21.4
Incr Delay (d2), s/veh	18.7	1.9	3.3	13.4	6.0	0.3	13.3	0.4	0.6	12.7	0.6	0.2
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	1.7	5.8	5.0	6.2	11.6	2.2	7.5	3.5	2.3	2.5	4.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.2	48.2	49.3	65.1	48.0	34.9	63.4	17.3	16.8	68.7	24.7	21.6
LnGrp LOS	E	D	D	E	D	C	E	B	B	E	C	C
Approach Vol, veh/h		646			1090			870			614	
Approach Delay, s/veh		50.5			49.8			29.5			29.9	
Approach LOS		D			D			C			C	

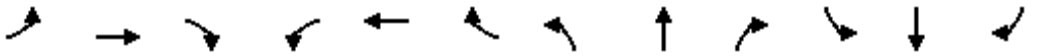
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	64.7	19.2	25.1	22.3	53.5	8.6	35.7
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	12.5	43.0	22.5	25.0	27.5	28.0	9.5	38.0
Max Q Clear Time (g_c+I1), s	7.1	11.2	14.4	15.3	17.4	13.3	5.1	27.9
Green Ext Time (p_c), s	0.1	3.4	0.3	2.1	0.4	2.5	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	253	213	172	51	207	279	123	360	18	389	1201	315
Future Volume (vph)	253	213	172	51	207	279	123	360	18	389	1201	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	281	237	191	57	230	310	137	400	20	432	1334	350
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	237	191	57	230	310	137	420	0	432	1334	350
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.0	38.0	38.0	11.0	25.0		16.0	40.0		31.0	55.0	
Total Split (%)	20.0%	31.7%	31.7%	9.2%	20.8%		13.3%	33.3%		25.8%	45.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	213	172	51	207	279	123	360	18	389	1201	315
Future Volume (veh/h)	253	213	172	51	207	279	123	360	18	389	1201	315
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	281	237	191	57	230	0	137	400	20	432	1334	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	576	254	122	343		194	2517	125	509	3045	
Arrive On Green	0.10	0.16	0.16	0.04	0.10	0.00	0.06	0.51	0.51	0.15	0.60	0.00
Sat Flow, veh/h	3456	3554	1570	3456	3554	1585	3456	4982	247	3456	5106	1585
Grp Volume(v), veh/h	281	237	191	57	230	0	137	272	148	432	1334	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1570	1728	1777	1585	1728	1702	1825	1728	1702	1585
Q Serve(g_s), s	9.5	7.2	13.9	1.9	7.5	0.0	4.7	5.2	5.2	14.6	17.1	0.0
Cycle Q Clear(g_c), s	9.5	7.2	13.9	1.9	7.5	0.0	4.7	5.2	5.2	14.6	17.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	349	576	254	122	343		194	1720	922	509	3045	
V/C Ratio(X)	0.81	0.41	0.75	0.47	0.67		0.71	0.16	0.16	0.85	0.44	
Avail Cap(c_a), veh/h	562	992	438	187	607		331	1720	922	763	3045	
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	52.8	45.1	48.0	56.8	52.4	0.0	55.6	16.0	16.0	49.8	13.2	0.0
Incr Delay (d2), s/veh	4.4	0.5	4.4	2.7	2.3	0.0	4.6	0.2	0.4	5.8	0.5	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	4.2	3.1	5.6	0.9	3.4	0.0	2.1	1.9	2.1	6.4	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.2	45.6	52.4	59.5	54.7	0.0	60.3	16.2	16.4	55.7	13.7	0.0
LnGrp LOS	E	D	D	E	D		E	B	B	E	B	
Approach Vol, veh/h		709			287	A		557			1766	A
Approach Delay, s/veh		52.0			55.6			27.1			24.0	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	65.1	8.8	23.9	11.2	76.1	16.6	16.1
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	26.5	35.5	6.5	33.5	11.5	50.5	19.5	20.5
Max Q Clear Time (g_c+I1), s	16.6	7.2	3.9	15.9	6.7	19.1	11.5	9.5
Green Ext Time (p_c), s	1.1	2.3	0.0	1.8	0.1	10.1	0.6	0.9

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

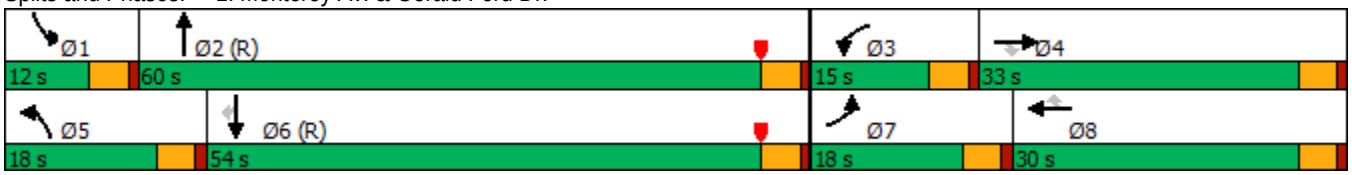
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	261	88	79	278	79	116	1058	79	40	838	99
Future Volume (vph)	122	261	88	79	278	79	116	1058	79	40	838	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	128	275	93	83	293	83	122	1114	83	42	882	104
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	275	93	83	293	83	122	1197	0	42	882	104
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	18.0	33.0	33.0	15.0	30.0	30.0	18.0	60.0		12.0	54.0	54.0
Total Split (%)	15.0%	27.5%	27.5%	12.5%	25.0%	25.0%	15.0%	50.0%		10.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	261	88	79	278	79	116	1058	79	40	838	99
Future Volume (veh/h)	122	261	88	79	278	79	116	1058	79	40	838	99
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	275	93	83	293	83	122	1114	83	42	882	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	469	207	135	416	183	179	3140	234	108	3203	
Arrive On Green	0.05	0.13	0.13	0.01	0.04	0.04	0.05	0.65	0.65	0.03	0.63	0.00
Sat Flow, veh/h	3456	3554	1567	3456	3554	1565	3456	4848	361	3456	5106	1585
Grp Volume(v), veh/h	128	275	93	83	293	83	122	782	415	42	882	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1567	1728	1777	1565	1728	1702	1804	1728	1702	1585
Q Serve(g_s), s	4.4	8.7	6.6	2.9	9.8	6.2	4.2	12.6	12.6	1.4	9.3	0.0
Cycle Q Clear(g_c), s	4.4	8.7	6.6	2.9	9.8	6.2	4.2	12.6	12.6	1.4	9.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	186	469	207	135	416	183	179	2205	1169	108	3203	
V/C Ratio(X)	0.69	0.59	0.45	0.62	0.70	0.45	0.68	0.35	0.36	0.39	0.28	
Avail Cap(c_a), veh/h	389	844	372	302	755	333	389	2205	1169	216	3203	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.8	49.0	48.1	58.3	55.6	53.9	55.9	9.7	9.7	57.0	10.1	0.0
Incr Delay (d2), s/veh	4.5	1.2	1.5	4.4	2.2	1.7	4.5	0.4	0.8	2.2	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	2.0	3.8	2.6	1.3	4.6	2.5	1.9	4.1	4.4	0.6	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.3	50.2	49.6	62.8	57.8	55.6	60.4	10.1	10.5	59.2	10.3	0.0
LnGrp LOS	E	D	D	E	E	E	E	B	B	E	B	
Approach Vol, veh/h		496			459			1319			924	A
Approach Delay, s/veh		52.7			58.3			14.9			12.5	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	82.2	9.2	20.3	10.7	79.8	11.0	18.6
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	55.5	10.5	28.5	13.5	49.5	13.5	25.5
Max Q Clear Time (g_c+I1), s	3.4	14.6	4.9	10.7	6.2	11.3	6.4	11.8
Green Ext Time (p_c), s	0.0	8.4	0.1	1.6	0.2	6.0	0.2	1.5

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

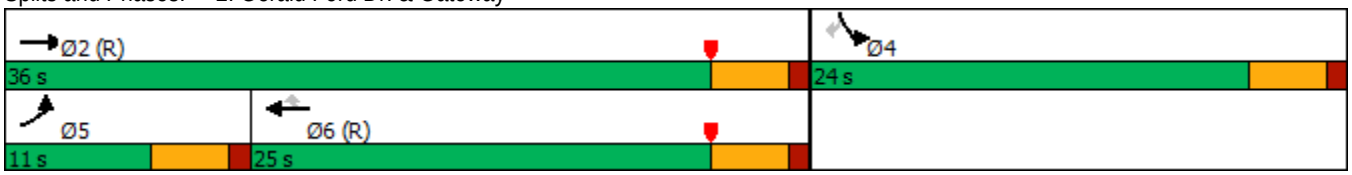
Notes

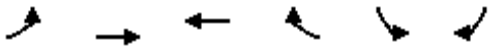
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	340	368	65	102	102
Future Volume (vph)	40	340	368	65	102	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	44	374	404	71	112	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	44	374	404	71	112	112
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	36.0	25.0	25.0	24.0	24.0
Total Split (%)	18.3%	60.0%	41.7%	41.7%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Gerald Ford Dr. & Gateway

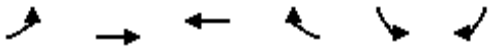




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	340	368	65	102	102
Future Volume (veh/h)	40	340	368	65	102	102
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	374	404	71	112	112
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	77	1866	2077	641	579	515
Arrive On Green	0.04	0.52	0.41	0.41	0.32	0.32
Sat Flow, veh/h	1781	3647	5274	1575	1781	1585
Grp Volume(v), veh/h	44	374	404	71	112	112
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1575	1781	1585
Q Serve(g_s), s	1.5	3.4	3.1	1.7	2.7	3.1
Cycle Q Clear(g_c), s	1.5	3.4	3.1	1.7	2.7	3.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	77	1866	2077	641	579	515
V/C Ratio(X)	0.57	0.20	0.19	0.11	0.19	0.22
Avail Cap(c_a), veh/h	193	1866	2077	641	579	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	7.6	11.5	11.1	14.6	14.7
Incr Delay (d2), s/veh	5.8	0.2	0.2	0.3	0.7	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.9	0.5	1.1	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.9	7.8	11.7	11.4	15.3	15.7
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		418	475		224	
Approach Delay, s/veh		10.5	11.6		15.5	
Approach LOS		B	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.0		24.0	7.1	28.9
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		31.5		19.5	6.5	20.5
Max Q Clear Time (g_c+I1), s		5.4		5.1	3.5	5.1
Green Ext Time (p_c), s		2.1		0.6	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	37	441	405	37	18	22
Future Volume (vph)	37	441	405	37	18	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190			110	0	50
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Link Speed (mph)		50	50		30	
Link Distance (ft)		2201	915		430	
Travel Time (s)		30.0	12.5		9.8	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	39	464	426	39	19	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	464	426	39	19	23
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	441	405	37	18	22
Future Vol, veh/h	37	441	405	37	18	22
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	190	-	-	110	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	464	426	39	19	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	470	0	-	0	746	223
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	315	-
Critical Hdwy	5.34	-	-	-	6.29	7.14
Critical Hdwy Stg 1	-	-	-	-	6.64	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	3.12	-	-	-	3.67	3.92
Pot Cap-1 Maneuver	700	-	-	-	380	665
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	697	-	-	-	355	659
Mov Cap-2 Maneuver	-	-	-	-	355	-
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	685	-

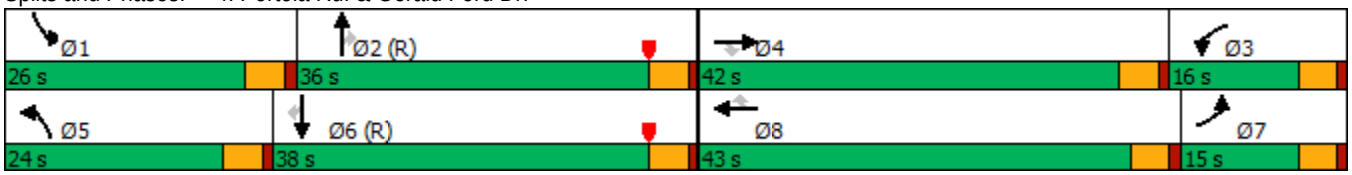
Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	13
HCM LOS			B

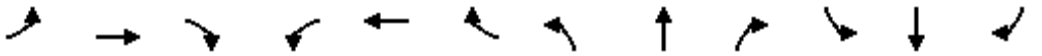
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	697	-	-	-	355	659
HCM Lane V/C Ratio	0.056	-	-	-	0.053	0.035
HCM Control Delay (s)	10.5	-	-	-	15.7	10.7
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	320	124	33	312	115	121	282	51	138	244	9
Future Volume (vph)	4	320	124	33	312	115	121	282	51	138	244	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	348	135	36	339	125	132	307	55	150	265	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	348	135	36	339	125	132	307	55	150	265	10
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	42.0	42.0	16.0	43.0	43.0	24.0	36.0	36.0	26.0	38.0	38.0
Total Split (%)	12.5%	35.0%	35.0%	13.3%	35.8%	35.8%	20.0%	30.0%	30.0%	21.7%	31.7%	31.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	320	124	33	312	115	121	282	51	138	244	9
Future Volume (veh/h)	4	320	124	33	312	115	121	282	51	138	244	9
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	348	135	36	339	0	132	307	55	150	265	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	475	210	101	546		190	3194	989	213	3228	
Arrive On Green	0.06	0.13	0.13	0.01	0.04	0.00	0.11	1.00	1.00	0.06	0.63	0.00
Sat Flow, veh/h	1781	3554	1567	3456	5106	1585	3456	5106	1581	3456	5106	1585
Grp Volume(v), veh/h	4	348	135	36	339	0	132	307	55	150	265	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1567	1728	1702	1585	1728	1702	1581	1728	1702	1585
Q Serve(g_s), s	0.3	11.3	8.3	1.2	7.9	0.0	4.4	0.0	0.0	5.1	2.4	0.0
Cycle Q Clear(g_c), s	0.3	11.3	8.3	1.2	7.9	0.0	4.4	0.0	0.0	5.1	2.4	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	99	475	210	101	546		190	3194	989	213	3228	
V/C Ratio(X)	0.04	0.73	0.64	0.36	0.62		0.69	0.10	0.06	0.70	0.08	
Avail Cap(c_a), veh/h	156	1111	490	331	1638		562	3194	989	619	3228	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.6	49.9	35.6	58.3	55.5	0.0	52.4	0.0	0.0	55.2	8.6	0.0
Incr Delay (d2), s/veh	0.2	2.2	3.3	2.1	1.1	0.0	4.5	0.1	0.1	4.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.0	3.3	0.6	3.5	0.0	1.9	0.0	0.0	2.3	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	52.1	38.9	60.4	56.6	0.0	56.9	0.1	0.1	59.4	8.6	0.0
LnGrp LOS	D	D	D	E	E		E	A	A	E	A	
Approach Vol, veh/h		487			375	A		494			415	A
Approach Delay, s/veh		48.5			57.0			15.3			27.0	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	79.6	8.0	20.5	11.1	80.4	11.2	17.3
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	21.5	31.5	11.5	37.5	19.5	33.5	10.5	38.5
Max Q Clear Time (g_c+I1), s	7.1	2.0	3.2	13.3	6.4	4.4	2.3	9.9
Green Ext Time (p_c), s	0.3	1.9	0.0	2.4	0.3	1.5	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	36.0
HCM 6th LOS	D

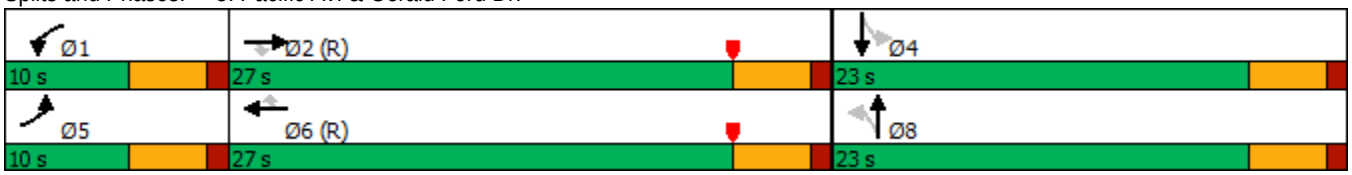
Notes

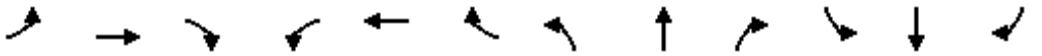
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	497	3	3	450	44	6	3	2	59	4	4
Future Volume (vph)	9	497	3	3	450	44	6	3	2	59	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	10	546	3	3	495	48	7	3	2	65	4	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	546	3	3	495	48	7	5	0	65	8	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0		23.0	23.0	
Total Split (%)	16.7%	45.0%	45.0%	16.7%	45.0%	45.0%	38.3%	38.3%		38.3%	38.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	497	3	3	450	44	6	3	2	59	4	4
Future Volume (veh/h)	9	497	3	3	450	44	6	3	2	59	4	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	546	3	3	495	48	7	3	2	65	4	4
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	2362	731	7	2318	717	549	658	393	551	559	477
Arrive On Green	0.01	0.46	0.46	0.00	0.45	0.45	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1580	1781	5106	1580	1401	2135	1275	1404	1814	1546
Grp Volume(v), veh/h	10	546	3	3	495	48	7	2	3	65	4	4
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1580	1401	1777	1633	1404	1777	1583
Q Serve(g_s), s	0.3	3.9	0.1	0.1	3.5	1.0	0.2	0.1	0.1	2.0	0.1	0.1
Cycle Q Clear(g_c), s	0.3	3.9	0.1	0.1	3.5	1.0	0.3	0.1	0.1	2.1	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.78	1.00		0.98
Lane Grp Cap(c), veh/h	23	2362	731	7	2318	717	549	548	504	551	548	488
V/C Ratio(X)	0.44	0.23	0.00	0.41	0.21	0.07	0.01	0.00	0.01	0.12	0.01	0.01
Avail Cap(c_a), veh/h	163	2362	731	163	2318	717	549	548	504	551	548	488
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)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	9.7	8.7	29.8	9.9	9.2	14.5	14.4	14.4	15.1	14.4	14.4
Incr Delay (d2), s/veh	10.3	0.2	0.0	33.7	0.2	0.2	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	0.0	0.1	1.1	0.3	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	9.9	8.7	63.5	10.1	9.4	14.5	14.4	14.4	15.5	14.4	14.4
LnGrp LOS	D	A	A	E	B	A	B	B	B	B	B	B
Approach Vol, veh/h		559			546			12			73	
Approach Delay, s/veh		10.4			10.3			14.5			15.4	
Approach LOS		B			B			B			B	

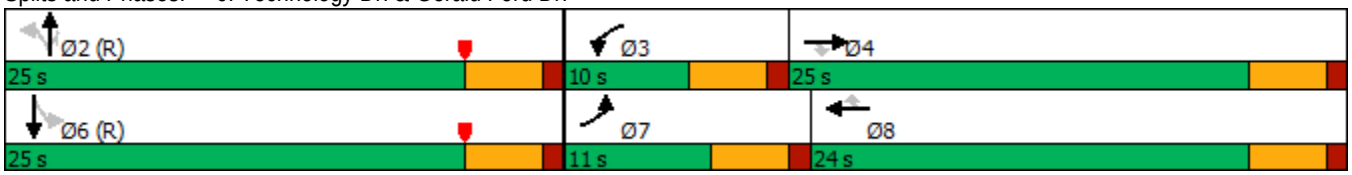
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	32.3		23.0	5.3	31.7		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		18.5	5.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	2.1	5.9		4.1	2.3	5.5		2.3				
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	3.0		0.0				

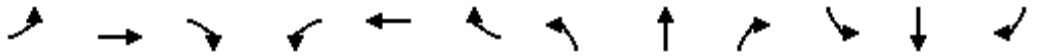
Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	510	11	6	405	37	46	15	36	69	12	46
Future Volume (vph)	37	510	11	6	405	37	46	15	36	69	12	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	41	560	12	7	445	41	51	16	40	76	13	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	560	12	7	445	41	51	16	40	76	64	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	11.0	25.0	25.0	10.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	18.3%	41.7%	41.7%	16.7%	40.0%	40.0%	41.7%	41.7%	41.7%	41.7%	41.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	510	11	6	405	37	46	15	36	69	12	46
Future Volume (veh/h)	37	510	11	6	405	37	46	15	36	69	12	46
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		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	560	12	7	445	41	51	16	40	76	13	51
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	73	1003	307	16	839	256	857	1065	900	881	189	741
Arrive On Green	0.04	0.20	0.20	0.01	0.16	0.16	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1781	5106	1565	1781	5106	1561	1335	1870	1581	1344	332	1301
Grp Volume(v), veh/h	41	560	12	7	445	41	51	16	40	76	0	64
Grp Sat Flow(s),veh/h/ln	1781	1702	1565	1781	1702	1561	1335	1870	1581	1344	0	1632
Q Serve(g_s), s	1.4	5.9	0.4	0.2	4.8	1.4	1.1	0.2	0.7	1.6	0.0	1.1
Cycle Q Clear(g_c), s	1.4	5.9	0.4	0.2	4.8	1.4	2.1	0.2	0.7	1.8	0.0	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	73	1003	307	16	839	256	857	1065	900	881	0	929
V/C Ratio(X)	0.56	0.56	0.04	0.43	0.53	0.16	0.06	0.02	0.04	0.09	0.00	0.07
Avail Cap(c_a), veh/h	193	1745	535	163	1659	507	857	1065	900	881	0	929
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	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.2	21.8	19.5	29.6	23.0	21.5	6.3	5.6	5.7	6.0	0.0	5.8
Incr Delay (d2), s/veh	6.5	0.5	0.1	15.5	0.5	0.3	0.1	0.0	0.1	0.2	0.0	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	0.7	2.2	0.1	0.2	1.8	0.5	0.3	0.1	0.2	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	22.3	19.6	45.0	23.4	21.8	6.4	5.6	5.8	6.2	0.0	5.9
LnGrp LOS	C	C	B	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		613			493			107			140	
Approach Delay, s/veh		23.0			23.6			6.1			6.1	
Approach LOS		C			C			A			A	

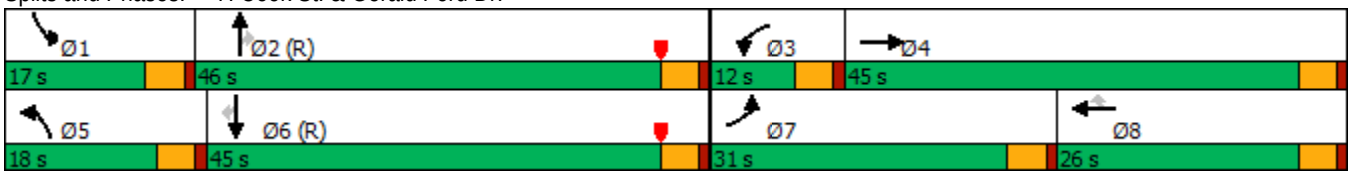
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		38.7	5.1	16.3		38.7	7.0	14.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	5.5	20.5		20.5	6.5	19.5				
Max Q Clear Time (g_c+I1), s		4.1	2.2	7.9		3.8	3.4	6.8				
Green Ext Time (p_c), s		0.3	0.0	2.9		0.4	0.0	2.3				

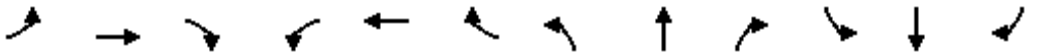
Intersection Summary												
HCM 6th Ctrl Delay			20.1									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	212	98	58	166	150	156	945	25	154	633	160
Future Volume (vph)	392	212	98	58	166	150	156	945	25	154	633	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	417	226	104	62	177	160	166	1005	27	164	673	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	417	226	104	62	177	160	166	1005	27	164	673	170
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	31.0	45.0		12.0	26.0	26.0	18.0	46.0	46.0	17.0	45.0	45.0
Total Split (%)	25.8%	37.5%		10.0%	21.7%	21.7%	15.0%	38.3%	38.3%	14.2%	37.5%	37.5%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	212	98	58	166	150	156	945	25	154	633	160
Future Volume (veh/h)	392	212	98	58	166	150	156	945	25	154	633	160
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	417	226	0	62	177	160	166	1005	27	164	673	170
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	489	826		126	453	200	226	2638	817	223	2634	815
Arrive On Green	0.24	0.39	0.00	0.04	0.13	0.13	0.07	0.52	0.52	0.06	0.52	0.52
Sat Flow, veh/h	3456	3554	1585	3456	3554	1566	3456	5106	1580	3456	5106	1580
Grp Volume(v), veh/h	417	226	0	62	177	160	166	1005	27	164	673	170
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1566	1728	1702	1580	1728	1702	1580
Q Serve(g_s), s	13.9	5.2	0.0	2.1	5.5	11.9	5.7	14.2	1.0	5.6	8.8	7.0
Cycle Q Clear(g_c), s	13.9	5.2	0.0	2.1	5.5	11.9	5.7	14.2	1.0	5.6	8.8	7.0
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	489	826		126	453	200	226	2638	817	223	2634	815
V/C Ratio(X)	0.85	0.27		0.49	0.39	0.80	0.73	0.38	0.03	0.73	0.26	0.21
Avail Cap(c_a), veh/h	763	1199		216	637	281	389	2638	817	360	2634	815
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	29.8	0.0	56.7	48.1	50.9	55.1	17.4	14.3	55.1	16.2	15.8
Incr Delay (d2), s/veh	5.3	0.2	0.0	3.0	0.6	10.6	4.6	0.4	0.1	4.7	0.2	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	5.6	2.1	0.0	0.9	2.4	5.1	2.5	5.1	0.4	2.5	3.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	30.0	0.0	59.7	48.6	61.5	59.6	17.9	14.3	59.8	16.4	16.3
LnGrp LOS	D	C		E	D	E	E	B	B	E	B	B
Approach Vol, veh/h		643	A		399			1198			1007	
Approach Delay, s/veh		42.9			55.5			23.6			23.5	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	66.5	8.9	32.4	12.3	66.4	21.5	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	12.5	41.5	7.5	40.5	13.5	40.5	26.5	21.5
Max Q Clear Time (g_c+I1), s	7.6	16.2	4.1	7.2	7.7	10.8	15.9	13.9
Green Ext Time (p_c), s	0.2	6.7	0.0	1.4	0.2	4.8	1.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	31.3
HCM 6th LOS	C

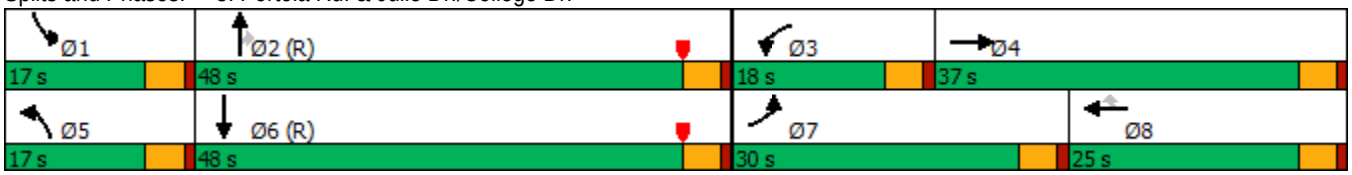
Notes

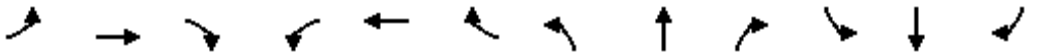
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	12	8	13	3	5	5	401	9	5	354	42
Future Volume (vph)	49	12	8	13	3	5	5	401	9	5	354	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1533			463			3682			1684	
Travel Time (s)		34.8			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	13	9	14	3	5	5	436	10	5	385	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	22	0	14	3	5	5	436	10	5	431	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	30.0	37.0		18.0	25.0	25.0	17.0	48.0	48.0	17.0	48.0	
Total Split (%)	25.0%	30.8%		15.0%	20.8%	20.8%	14.2%	40.0%	40.0%	14.2%	40.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	12	8	13	3	5	5	401	9	5	354	42
Future Volume (veh/h)	49	12	8	13	3	5	5	401	9	5	354	42
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		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	13	9	14	3	5	5	436	10	5	385	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	75	52	28	94	78	11	3851	1192	11	3494	409
Arrive On Green	0.04	0.07	0.07	0.02	0.05	0.05	0.01	0.75	0.75	0.01	1.00	1.00
Sat Flow, veh/h	1781	1020	706	1781	1870	1538	1781	5106	1580	1781	4632	543
Grp Volume(v), veh/h	53	0	22	14	3	5	5	436	10	5	281	150
Grp Sat Flow(s),veh/h/ln	1781	0	1726	1781	1870	1538	1781	1702	1580	1781	1702	1771
Q Serve(g_s), s	3.5	0.0	1.4	0.9	0.2	0.4	0.3	2.8	0.2	0.3	0.0	0.0
Cycle Q Clear(g_c), s	3.5	0.0	1.4	0.9	0.2	0.4	0.3	2.8	0.2	0.3	0.0	0.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	69	0	127	28	94	78	11	3851	1192	11	2567	1335
V/C Ratio(X)	0.77	0.00	0.17	0.51	0.03	0.06	0.44	0.11	0.01	0.44	0.11	0.11
Avail Cap(c_a), veh/h	379	0	467	200	320	263	186	3851	1192	186	2567	1335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99
Uniform Delay (d), s/veh	57.1	0.0	52.1	58.6	54.2	54.3	59.4	4.0	3.6	59.0	0.0	0.0
Incr Delay (d2), s/veh	15.9	0.0	0.6	13.6	0.1	0.3	24.1	0.1	0.0	24.1	0.1	0.2
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	1.9	0.0	0.6	0.5	0.1	0.2	0.2	0.7	0.1	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	0.0	52.8	72.2	54.3	54.6	83.5	4.0	3.7	83.1	0.1	0.2
LnGrp LOS	E	A	D	E	D	D	F	A	A	F	A	A
Approach Vol, veh/h		75			22			451			436	
Approach Delay, s/veh		67.1			65.7			4.9			1.1	
Approach LOS		E			E			A			A	

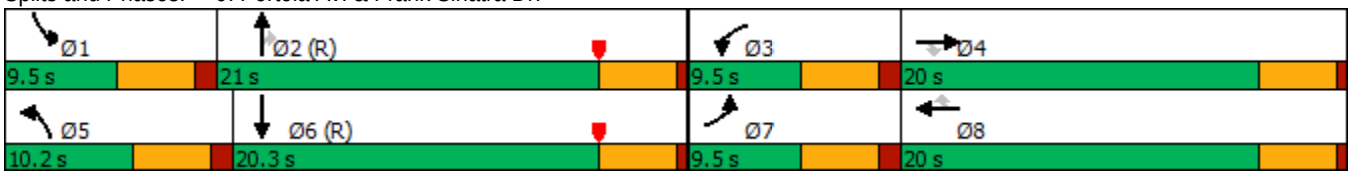
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	95.0	6.4	13.4	5.3	95.0	9.2	10.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	43.5	13.5	32.5	12.5	43.5	25.5	20.5
Max Q Clear Time (g_c+I1), s	2.3	4.8	2.9	3.4	2.3	2.0	5.5	2.4
Green Ext Time (p_c), s	0.0	2.7	0.0	0.1	0.0	2.4	0.1	0.0

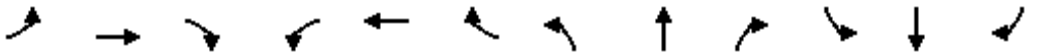
Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	573	82	90	354	13	130	390	100	67	280	28
Future Volume (vph)	12	573	82	90	354	13	130	390	100	67	280	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	13	610	87	96	377	14	138	415	106	71	298	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	610	87	96	377	14	138	415	106	71	328	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	10.2	21.0	21.0	9.5	20.3	
Total Split (%)	15.8%	33.3%	33.3%	15.8%	33.3%	33.3%	17.0%	35.0%	35.0%	15.8%	33.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	573	82	90	354	13	130	390	100	67	280	28
Future Volume (veh/h)	12	573	82	90	354	13	130	390	100	67	280	28
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	610	87	96	377	14	138	415	106	71	298	30
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	796	353	123	983	436	169	1868	578	103	1552	153
Arrive On Green	0.02	0.22	0.22	0.07	0.28	0.28	0.09	0.37	0.37	0.06	0.33	0.33
Sat Flow, veh/h	1781	3554	1574	1781	3554	1576	1781	5106	1579	1781	4722	466
Grp Volume(v), veh/h	13	610	87	96	377	14	138	415	106	71	213	115
Grp Sat Flow(s),veh/h/ln	1781	1777	1574	1781	1777	1576	1781	1702	1579	1781	1702	1784
Q Serve(g_s), s	0.4	9.6	2.7	3.2	5.2	0.4	4.6	3.4	2.7	2.3	2.7	2.8
Cycle Q Clear(g_c), s	0.4	9.6	2.7	3.2	5.2	0.4	4.6	3.4	2.7	2.3	2.7	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	29	796	353	123	983	436	169	1868	578	103	1119	586
V/C Ratio(X)	0.45	0.77	0.25	0.78	0.38	0.03	0.82	0.22	0.18	0.69	0.19	0.20
Avail Cap(c_a), veh/h	148	948	420	148	983	436	169	1868	578	148	1119	586
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	29.2	21.8	19.1	27.5	17.6	15.8	26.6	13.1	12.9	27.7	14.4	14.5
Incr Delay (d2), s/veh	10.5	3.2	0.4	19.5	0.2	0.0	25.6	0.3	0.7	7.9	0.4	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	0.3	3.7	0.9	1.9	1.8	0.1	2.9	1.0	0.9	1.1	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	25.0	19.5	47.0	17.8	15.9	52.2	13.4	13.6	35.7	14.8	15.2
LnGrp LOS	D	C	B	D	B	B	D	B	B	D	B	B
Approach Vol, veh/h		710			487			659			399	
Approach Delay, s/veh		24.6			23.5			21.6			18.6	
Approach LOS		C			C			C			B	

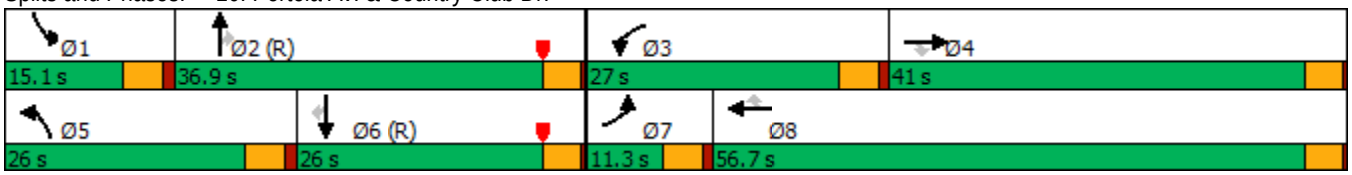
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	26.0	8.6	17.4	10.2	23.7	5.5	20.6
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.0	17.0	5.0	16.0	5.7	16.3	5.0	16.0
Max Q Clear Time (g_c+I1), s	4.3	5.4	5.2	11.6	6.6	4.8	2.4	7.2
Green Ext Time (p_c), s	0.0	2.1	0.0	1.6	0.0	1.3	0.0	1.4

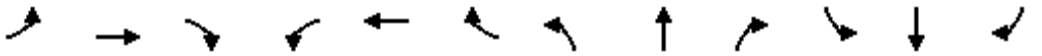
Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	741	168	177	531	121	163	445	170	72	377	50
Future Volume (vph)	36	741	168	177	531	121	163	445	170	72	377	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	37	764	173	182	547	125	168	459	175	74	389	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	764	173	182	547	125	168	459	175	74	389	52
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	11.3	41.0	41.0	27.0	56.7	56.7	26.0	36.9	36.9	15.1	26.0	26.0
Total Split (%)	9.4%	34.2%	34.2%	22.5%	47.3%	47.3%	21.7%	30.8%	30.8%	12.6%	21.7%	21.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	741	168	177	531	121	163	445	170	72	377	50
Future Volume (veh/h)	36	741	168	177	531	121	163	445	170	72	377	50
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	764	173	182	547	125	168	459	175	74	389	52
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	899	399	212	1217	541	198	1539	684	95	1334	593
Arrive On Green	0.03	0.25	0.25	0.12	0.34	0.34	0.11	0.43	0.43	0.05	0.38	0.38
Sat Flow, veh/h	1781	3554	1576	1781	3554	1578	1781	3554	1580	1781	3554	1579
Grp Volume(v), veh/h	37	764	173	182	547	125	168	459	175	74	389	52
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1781	1777	1578	1781	1777	1580	1781	1777	1579
Q Serve(g_s), s	2.5	24.5	11.1	12.0	14.4	6.8	11.1	10.1	8.5	4.9	9.2	2.6
Cycle Q Clear(g_c), s	2.5	24.5	11.1	12.0	14.4	6.8	11.1	10.1	8.5	4.9	9.2	2.6
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	53	899	399	212	1217	541	198	1539	684	95	1334	593
V/C Ratio(X)	0.70	0.85	0.43	0.86	0.45	0.23	0.85	0.30	0.26	0.78	0.29	0.09
Avail Cap(c_a), veh/h	101	1096	486	334	1561	693	319	1539	684	157	1334	593
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	57.7	42.6	37.6	51.9	30.7	28.2	52.4	22.1	21.7	56.1	26.3	24.2
Incr Delay (d2), s/veh	15.7	5.5	0.7	12.4	0.3	0.2	11.4	0.5	0.9	13.1	0.6	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	1.3	11.0	4.2	5.9	5.9	2.5	5.4	4.0	3.1	2.5	3.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	48.1	38.3	64.2	30.9	28.4	63.8	22.6	22.6	69.2	26.8	24.5
LnGrp LOS	E	D	D	E	C	C	E	C	C	E	C	C
Approach Vol, veh/h		974			854			802			515	
Approach Delay, s/veh		47.4			37.6			31.2			32.7	
Approach LOS		D			D			C			C	

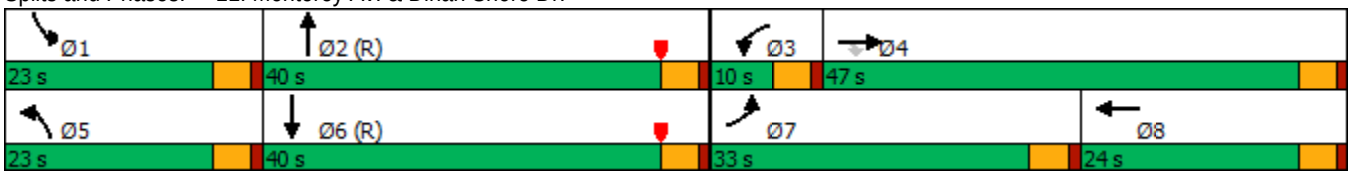
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	56.0	18.8	34.4	17.8	49.0	8.0	45.1
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	10.6	32.9	22.5	37.0	21.5	22.0	6.8	52.7
Max Q Clear Time (g_c+I1), s	6.9	12.1	14.0	26.5	13.1	11.2	4.5	16.4
Green Ext Time (p_c), s	0.0	3.1	0.3	3.8	0.2	1.7	0.0	3.9

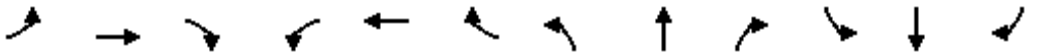
Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	503	276	256	42	336	571	295	936	28	306	693	317
Future Volume (vph)	503	276	256	42	336	571	295	936	28	306	693	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	519	285	264	43	346	589	304	965	29	315	714	327
Shared Lane Traffic (%)												
Lane Group Flow (vph)	519	285	264	43	346	589	304	994	0	315	714	327
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	33.0	47.0	47.0	10.0	24.0		23.0	40.0		23.0	40.0	
Total Split (%)	27.5%	39.2%	39.2%	8.3%	20.0%		19.2%	33.3%		19.2%	33.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	276	256	42	336	571	295	936	28	306	693	317
Future Volume (veh/h)	503	276	256	42	336	571	295	936	28	306	693	317
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	519	285	264	43	346	0	304	965	29	315	714	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	600	945	419	110	441		370	2251	68	381	2273	
Arrive On Green	0.17	0.27	0.27	0.03	0.12	0.00	0.11	0.44	0.44	0.11	0.45	0.00
Sat Flow, veh/h	3456	3554	1576	3456	3554	1585	3456	5093	153	3456	5106	1585
Grp Volume(v), veh/h	519	285	264	43	346	0	304	645	349	315	714	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1576	1728	1777	1585	1728	1702	1842	1728	1702	1585
Q Serve(g_s), s	17.5	7.7	17.7	1.5	11.3	0.0	10.3	15.6	15.7	10.7	10.8	0.0
Cycle Q Clear(g_c), s	17.5	7.7	17.7	1.5	11.3	0.0	10.3	15.6	15.7	10.7	10.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	600	945	419	110	441		370	1504	814	381	2273	
V/C Ratio(X)	0.87	0.30	0.63	0.39	0.78		0.82	0.43	0.43	0.83	0.31	
Avail Cap(c_a), veh/h	821	1259	558	158	577		533	1504	814	533	2273	
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	48.2	35.1	38.8	57.0	51.0	0.0	52.4	23.0	23.1	52.3	21.5	0.0
Incr Delay (d2), s/veh	7.3	0.2	1.6	2.3	5.2	0.0	6.7	0.9	1.7	7.4	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	7.9	3.3	6.8	0.7	5.2	0.0	4.6	6.0	6.7	4.8	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	35.3	40.4	59.2	56.2	0.0	59.2	23.9	24.7	59.7	21.8	0.0
LnGrp LOS	E	D	D	E	E		E	C	C	E	C	
Approach Vol, veh/h		1068			389	A		1298			1029	A
Approach Delay, s/veh		46.4			56.5			32.4			33.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	57.5	8.3	36.4	17.4	57.9	25.3	19.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.5	35.5	5.5	42.5	18.5	35.5	28.5	19.5
Max Q Clear Time (g_c+I1), s	12.7	17.7	3.5	19.7	12.3	12.8	19.5	13.3
Green Ext Time (p_c), s	0.5	5.3	0.0	2.5	0.5	4.3	1.3	1.0

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX 3.3: TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

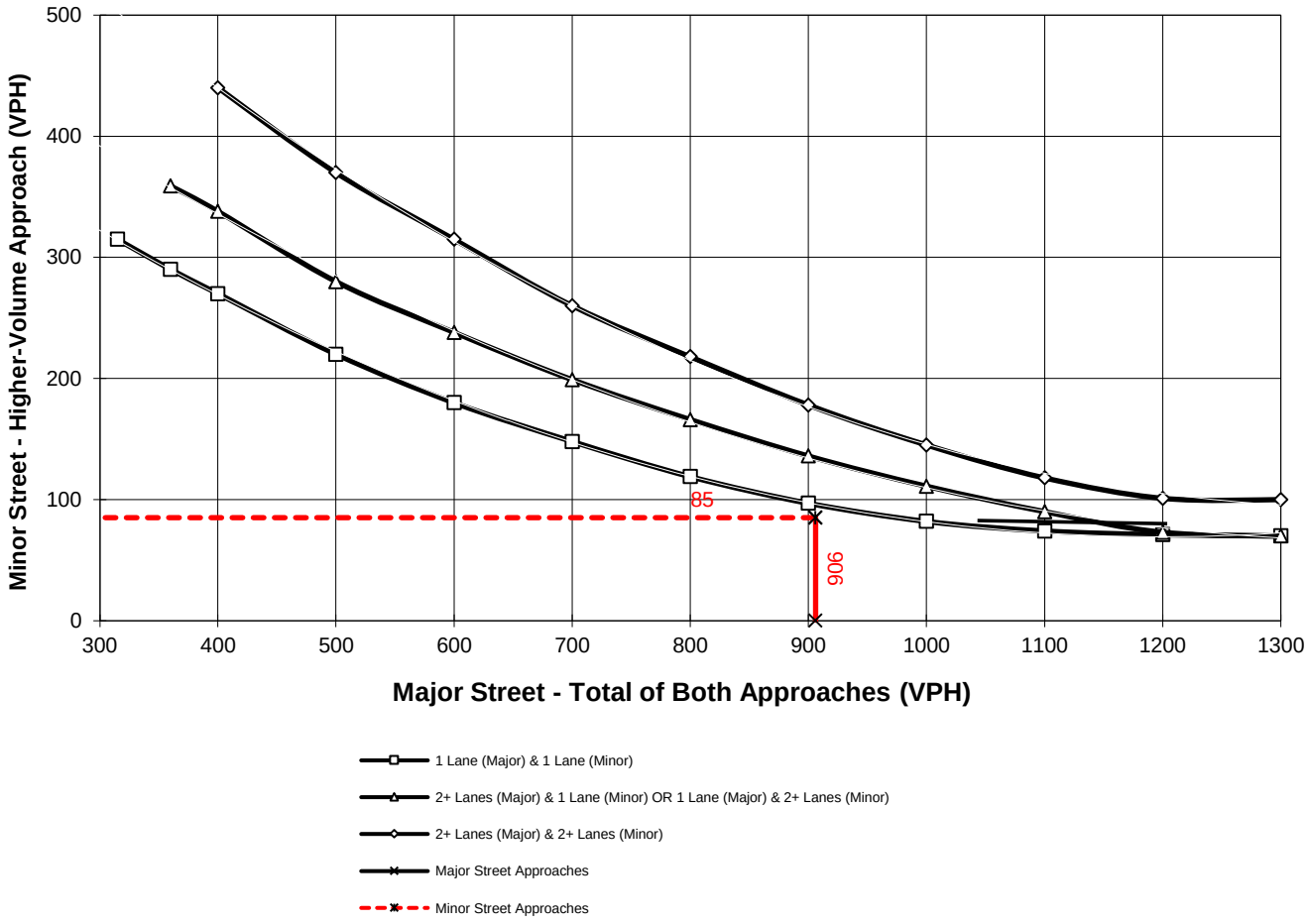
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2022) AM PEAK HOUR WARRANTS**

Major Street Name = **Gerald Ford Dr.**
Total of Both Approaches (VPH) = **906**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rembrandt Pkwy.**
High Volume Approach (VPH) = **85**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #3

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

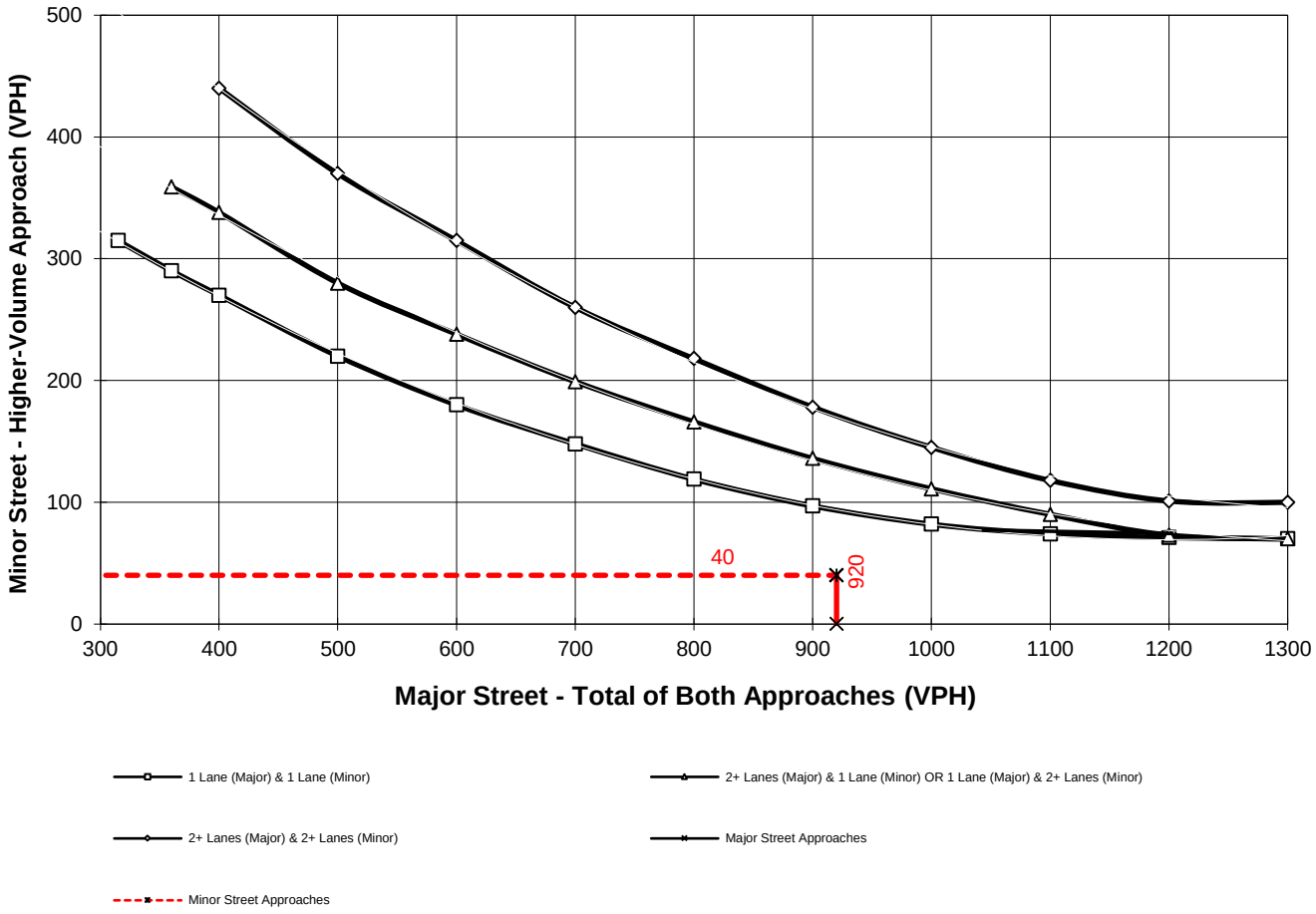
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2022) PM PEAK HOUR WARRANTS**

Major Street Name = **Gerald Ford Dr.**
Total of Both Approaches (VPH) = **920**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rembrandt Pkwy.**
High Volume Approach (VPH) = **40**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

Intersection ID: #3

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

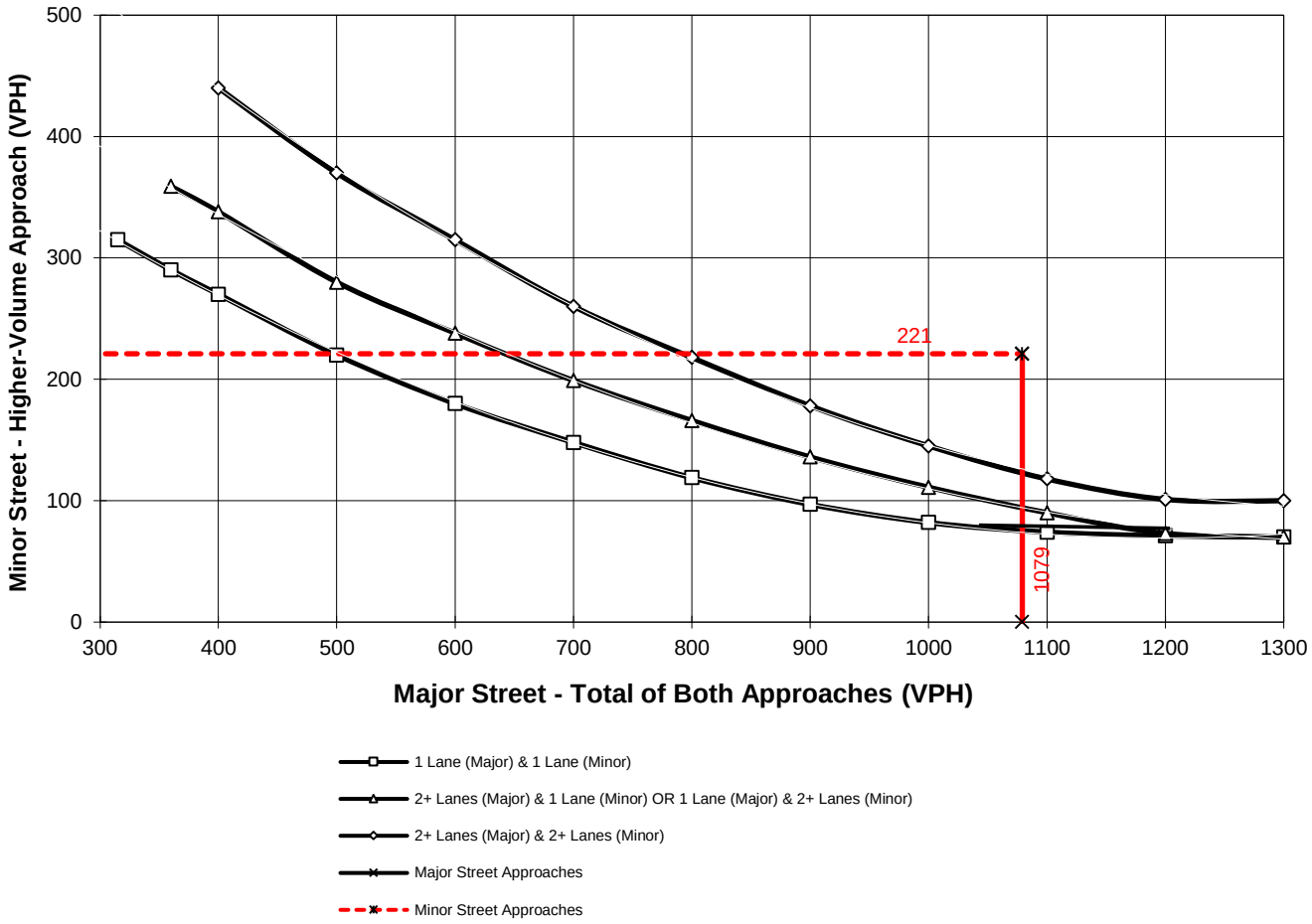
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP AM PEAK HOUR WARRANTS**

Major Street Name = **Gerald Ford Dr.**
Total of Both Approaches (VPH) = **1,079**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rembrandt Pkwy.**
High Volume Approach (VPH) = **221**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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

Intersection ID: #3

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

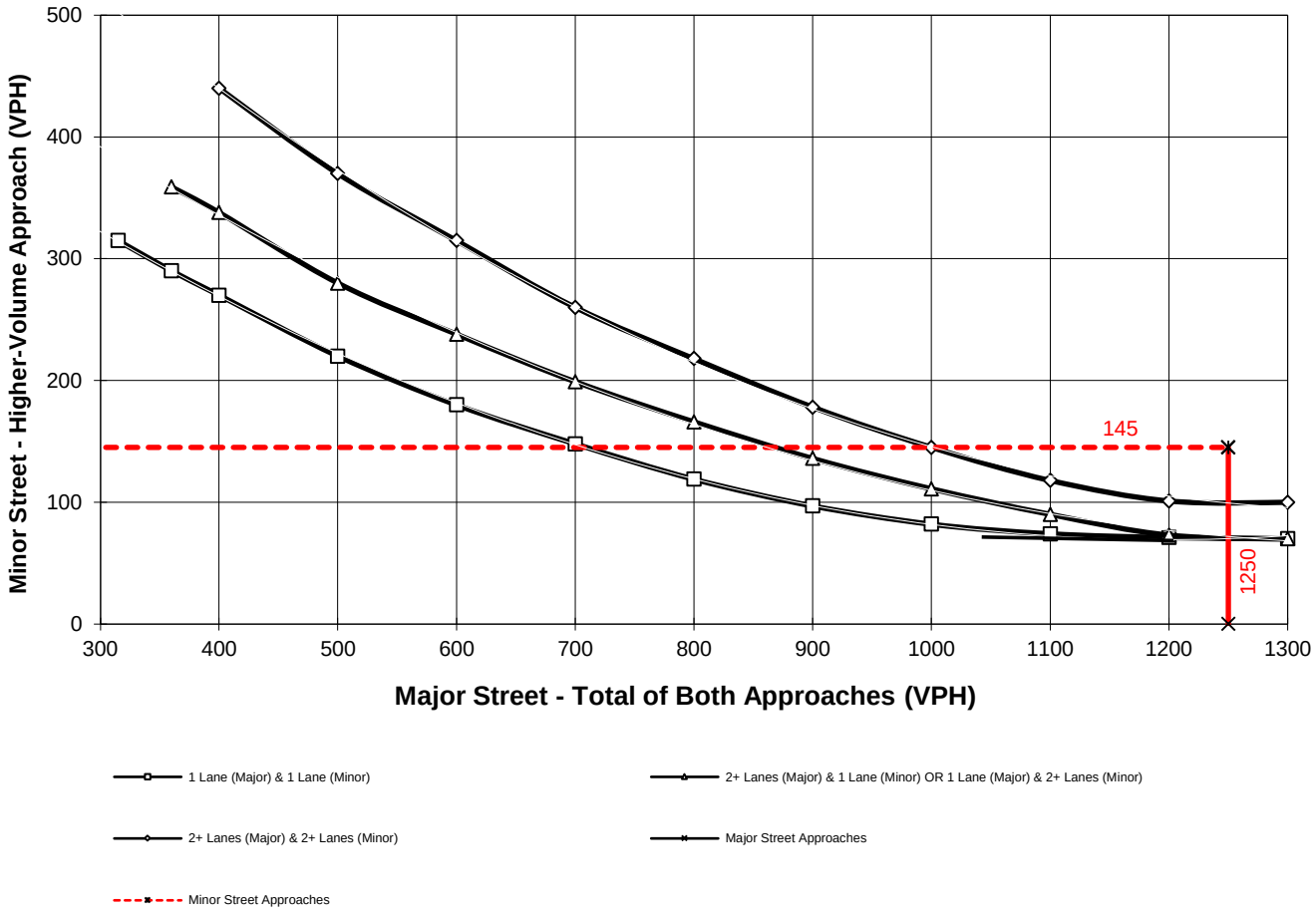
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP PM PEAK HOUR WARRANTS**

Major Street Name = **Gerald Ford Dr.**
Total of Both Approaches (VPH) = **1,250**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rembrandt Pkwy.**
High Volume Approach (VPH) = **145**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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

Intersection ID: #3

F:\UXRjobs_14600-15000\14702\Warrants\02 - EAP\03R_PM.xls\Fig 4C-4 (Rural Peak)

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM	TRAFFIC CONDITIONS		**EAP**
				CALC JC	DATE	05/31/22
Jurisdiction: **Palm Desert**				CHK	DATE	
Major Street: **Gerald Ford Dr.**				Critical Approach Speed (Major)		35 mph
Minor Street: **Rembrandt Pkwy.**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **14,966** vpd Minor Street Future ADT = **2,181** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …… [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements ADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **14,966** / 1 **2,181**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied (XX) / Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **14,966** / 1 **2,181**	12,000 *	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied (XX) / Not Satisfied				
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 91% **B** 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

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

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APPENDIX 5.1: EAP (2027) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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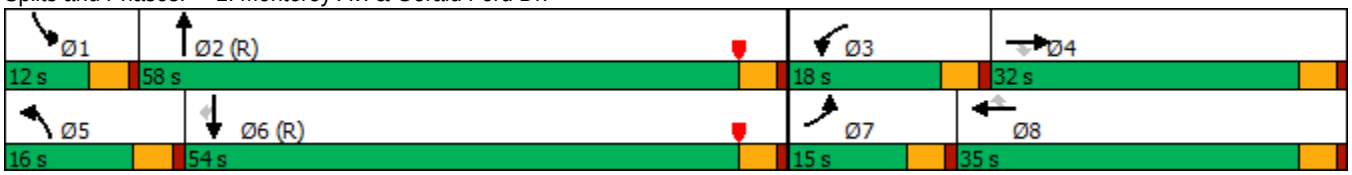
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	275	147	134	417	114	105	617	33	60	1081	103
Future Volume (vph)	94	275	147	134	417	114	105	617	33	60	1081	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	108	316	169	154	479	131	121	709	38	69	1243	118
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	316	169	154	479	131	121	747	0	69	1243	118
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	15.0	32.0	32.0	18.0	35.0	35.0	16.0	58.0		12.0	54.0	54.0
Total Split (%)	12.5%	26.7%	26.7%	15.0%	29.2%	29.2%	13.3%	48.3%		10.0%	45.0%	45.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	275	147	134	417	114	105	617	33	60	1081	103
Future Volume (veh/h)	94	275	147	134	417	114	105	617	33	60	1081	103
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	316	169	154	479	131	121	709	38	69	1243	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	554	245	215	609	269	177	2948	157	130	2964	
Arrive On Green	0.05	0.16	0.16	0.02	0.06	0.06	0.05	0.59	0.59	0.04	0.58	0.00
Sat Flow, veh/h	3456	3554	1570	3456	3554	1571	3456	4961	265	3456	5106	1585
Grp Volume(v), veh/h	108	316	169	154	479	131	121	486	261	69	1243	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1570	1728	1777	1571	1728	1702	1822	1728	1702	1585
Q Serve(g_s), s	3.7	9.9	12.2	5.3	16.0	9.7	4.1	8.1	8.2	2.4	16.2	0.0
Cycle Q Clear(g_c), s	3.7	9.9	12.2	5.3	16.0	9.7	4.1	8.1	8.2	2.4	16.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	162	554	245	215	609	269	177	2023	1083	130	2964	
V/C Ratio(X)	0.67	0.57	0.69	0.71	0.79	0.49	0.68	0.24	0.24	0.53	0.42	
Avail Cap(c_a), veh/h	302	814	360	389	903	399	331	2023	1083	216	2964	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.3	46.9	47.9	57.7	54.4	51.5	56.0	11.5	11.5	56.7	14.0	0.0
Incr Delay (d2), s/veh	4.6	0.9	3.5	4.2	2.7	1.3	4.6	0.3	0.5	3.4	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	1.7	4.3	4.8	2.4	7.8	4.0	1.8	2.8	3.1	1.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	47.8	51.4	61.9	57.1	52.8	60.6	11.8	12.1	60.1	14.4	0.0
LnGrp LOS	E	D	D	E	E	D	E	B	B	E	B	
Approach Vol, veh/h		593			764			868			1312	A
Approach Delay, s/veh		51.2			57.3			18.7			16.8	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	75.8	12.0	23.2	10.7	74.2	10.1	25.1
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	53.5	13.5	27.5	11.5	49.5	10.5	30.5
Max Q Clear Time (g_c+I1), s	4.4	10.2	7.3	14.2	6.1	18.2	5.7	18.0
Green Ext Time (p_c), s	0.0	4.5	0.2	1.9	0.1	9.1	0.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

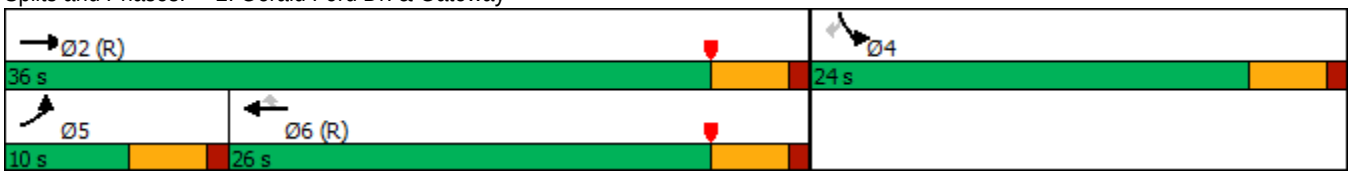
Notes

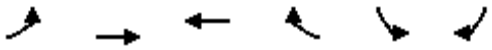
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	343	647	110	126	30
Future Volume (vph)	25	343	647	110	126	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	28	385	727	124	142	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	385	727	124	142	34
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	36.0	26.0	26.0	24.0	24.0
Total Split (%)	16.7%	60.0%	43.3%	43.3%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

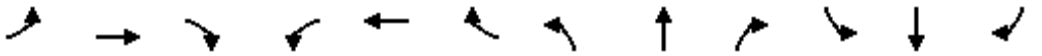
Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Gerald Ford Dr. & Gateway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	343	647	110	126	30
Future Volume (veh/h)	25	343	647	110	126	30
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	385	727	124	142	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	55	1866	2139	660	579	515
Arrive On Green	0.03	0.52	0.42	0.42	0.32	0.32
Sat Flow, veh/h	1781	3647	5274	1576	1781	1585
Grp Volume(v), veh/h	28	385	727	124	142	34
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1576	1781	1585
Q Serve(g_s), s	0.9	3.5	5.8	3.0	3.5	0.9
Cycle Q Clear(g_c), s	0.9	3.5	5.8	3.0	3.5	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	55	1866	2139	660	579	515
V/C Ratio(X)	0.51	0.21	0.34	0.19	0.25	0.07
Avail Cap(c_a), veh/h	163	1866	2139	660	579	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	7.6	11.8	11.0	14.9	14.0
Incr Delay (d2), s/veh	6.1	0.2	0.4	0.6	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.9	1.8	0.9	1.5	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.7	7.8	12.2	11.6	15.9	14.2
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		413	851		176	
Approach Delay, s/veh		9.6	12.2		15.5	
Approach LOS		A	B		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.0		24.0	6.4	29.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		31.5		19.5	5.5	21.5
Max Q Clear Time (g_c+I1), s		5.5		5.5	2.9	7.8
Green Ext Time (p_c), s		2.2		0.4	0.0	4.1
Intersection Summary						
HCM 6th Ctrl Delay			11.8			
HCM 6th LOS			B			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	363	46	33	595	24	127	2	92	50	1	44
Future Volume (vph)	18	363	46	33	595	24	127	2	92	50	1	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	20	408	52	37	669	27	143	2	103	56	1	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	460	0	37	669	27	0	145	103	0	57	49
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	363	46	33	595	24	127	2	92	50	1	44
Future Vol, veh/h	18	363	46	33	595	24	127	2	92	50	1	44
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	150	-	110	-	-	150	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	408	52	37	669	27	143	2	103	56	1	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	701	0	0	460	0	0	821	1249	235	998	1248	345
Stage 1	-	-	-	-	-	-	474	474	-	748	748	-
Stage 2	-	-	-	-	-	-	347	775	-	250	500	-
Critical Hdwy	5.34	-	-	4.14	-	-	6.99	6.54	6.94	6.99	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.54	5.54	-
Follow-up Hdwy	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92
Pot Cap-1 Maneuver	544	-	-	1097	-	-	294	172	767	225	172	556
Stage 1	-	-	-	-	-	-	523	556	-	305	418	-
Stage 2	-	-	-	-	-	-	608	406	-	706	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	541	-	-	1097	-	-	251	159	763	180	159	551
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	159	-	180	159	-
Stage 1	-	-	-	-	-	-	504	535	-	292	402	-
Stage 2	-	-	-	-	-	-	531	390	-	583	521	-

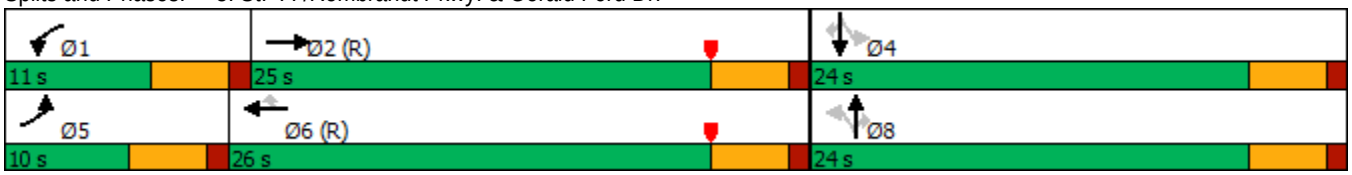
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	26.4	24
HCM LOS			D	C

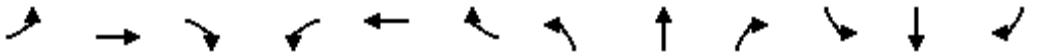
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	249	763	541	-	-	1097	-	-	180	551
HCM Lane V/C Ratio	0.582	0.135	0.037	-	-	0.034	-	-	0.318	0.09
HCM Control Delay (s)	37.8	10.5	11.9	-	-	8.4	-	-	34.1	12.2
HCM Lane LOS	E	B	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	3.3	0.5	0.1	-	-	0.1	-	-	1.3	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	363	46	33	595	24	127	2	92	50	1	44
Future Volume (vph)	18	363	46	33	595	24	127	2	92	50	1	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	20	408	52	37	669	27	143	2	103	56	1	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	460	0	37	669	27	0	145	103	0	57	49
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	25.0		11.0	26.0	26.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (%)	16.7%	41.7%		18.3%	43.3%	43.3%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: St. "A"/Rembrandt Pkwy. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	363	46	33	595	24	127	2	92	50	1	44
Future Volume (veh/h)	18	363	46	33	595	24	127	2	92	50	1	44
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	408	52	37	669	27	143	2	103	56	1	49
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	2	2	2	2	2	2
Cap, veh/h	42	1305	165	68	2177	672	119	1	515	119	1	513
Arrive On Green	0.02	0.28	0.28	0.04	0.43	0.43	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3170	402	1781	5106	1576	0	3	1585	0	3	1578
Grp Volume(v), veh/h	20	228	232	37	669	27	145	0	103	57	0	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1702	1576	3	0	1585	3	0	1578
Q Serve(g_s), s	0.7	6.1	6.2	1.2	5.2	0.6	0.0	0.0	2.8	0.0	0.0	1.3
Cycle Q Clear(g_c), s	0.7	6.1	6.2	1.2	5.2	0.6	19.5	0.0	2.8	19.5	0.0	1.3
Prop In Lane	1.00		0.22	1.00		1.00	0.99		1.00	0.98		1.00
Lane Grp Cap(c), veh/h	42	731	739	68	2177	672	120	0	515	120	0	513
V/C Ratio(X)	0.48	0.31	0.31	0.54	0.31	0.04	1.21	0.00	0.20	0.47	0.00	0.10
Avail Cap(c_a), veh/h	163	731	739	193	2177	672	120	0	515	120	0	513
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.2	15.0	15.0	28.3	11.4	10.0	29.9	0.0	14.6	29.6	0.0	14.1
Incr Delay (d2), s/veh	7.9	1.1	1.1	6.5	0.4	0.1	148.4	0.0	0.9	12.9	0.0	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	0.3	2.2	2.3	0.6	1.6	0.2	6.6	0.0	1.0	1.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	16.1	16.1	34.8	11.7	10.2	178.3	0.0	15.5	42.5	0.0	14.5
LnGrp LOS	D	B	B	C	B	B	F	A	B	D	A	B
Approach Vol, veh/h		480			733			248			106	
Approach Delay, s/veh		17.0			12.8			110.7			29.5	
Approach LOS		B			B			F			C	

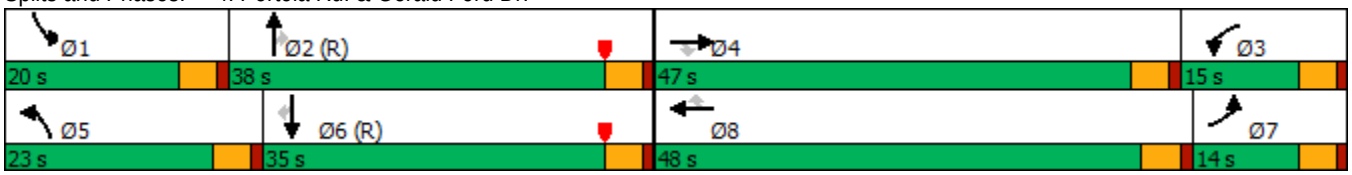
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	29.2		24.0	5.9	30.1		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	20.5		19.5	5.5	21.5		19.5				
Max Q Clear Time (g_c+I1), s	3.2	8.2		21.5	2.7	7.2		21.5				
Green Ext Time (p_c), s	0.0	1.9		0.0	0.0	3.5		0.0				

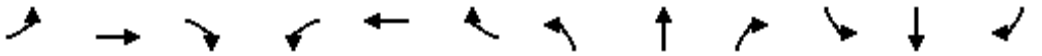
Intersection Summary			
HCM 6th Ctrl Delay		30.7	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	339	170	37	540	178	110	270	43	83	243	2
Future Volume (vph)	7	339	170	37	540	178	110	270	43	83	243	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	8	399	200	44	635	209	129	318	51	98	286	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	399	200	44	635	209	129	318	51	98	286	2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	14.0	47.0	47.0	15.0	48.0	48.0	23.0	38.0	38.0	20.0	35.0	35.0
Total Split (%)	11.7%	39.2%	39.2%	12.5%	40.0%	40.0%	19.2%	31.7%	31.7%	16.7%	29.2%	29.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	339	170	37	540	178	110	270	43	83	243	2
Future Volume (veh/h)	7	339	170	37	540	178	110	270	43	83	243	2
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	399	200	44	635	0	129	318	51	98	286	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	531	235	111	860		187	3188	987	152	3137	
Arrive On Green	0.01	0.15	0.15	0.03	0.17	0.00	0.11	1.00	1.00	0.04	0.61	0.00
Sat Flow, veh/h	1781	3554	1569	3456	5106	1585	3456	5106	1581	3456	5106	1585
Grp Volume(v), veh/h	8	399	200	44	635	0	129	318	51	98	286	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1569	1728	1702	1585	1728	1702	1581	1728	1702	1585
Q Serve(g_s), s	0.5	12.9	12.6	1.5	14.2	0.0	4.3	0.0	0.0	3.3	2.7	0.0
Cycle Q Clear(g_c), s	0.5	12.9	12.6	1.5	14.2	0.0	4.3	0.0	0.0	3.3	2.7	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	23	531	235	111	860		187	3188	987	152	3137	
V/C Ratio(X)	0.34	0.75	0.85	0.40	0.74		0.69	0.10	0.05	0.64	0.09	
Avail Cap(c_a), veh/h	141	1259	556	302	1851		533	3188	987	446	3137	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	48.9	35.8	56.9	47.4	0.0	52.5	0.0	0.0	56.4	9.5	0.0
Incr Delay (d2), s/veh	8.3	2.2	8.5	2.2	1.2	0.0	4.5	0.1	0.1	4.5	0.1	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	0.3	5.7	5.2	0.7	5.9	0.0	1.9	0.0	0.0	1.5	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.0	51.1	44.3	59.1	48.6	0.0	57.1	0.1	0.1	60.9	9.5	0.0
LnGrp LOS	E	D	D	E	D		E	A	A	E	A	
Approach Vol, veh/h		607			679	A		498			384	A
Approach Delay, s/veh		49.0			49.3			14.8			22.6	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	79.4	8.3	22.4	11.0	78.2	6.1	24.7
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	15.5	33.5	10.5	42.5	18.5	30.5	9.5	43.5
Max Q Clear Time (g_c+I1), s	5.3	2.0	3.5	14.9	6.3	4.7	2.5	16.2
Green Ext Time (p_c), s	0.2	2.0	0.0	3.0	0.3	1.6	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

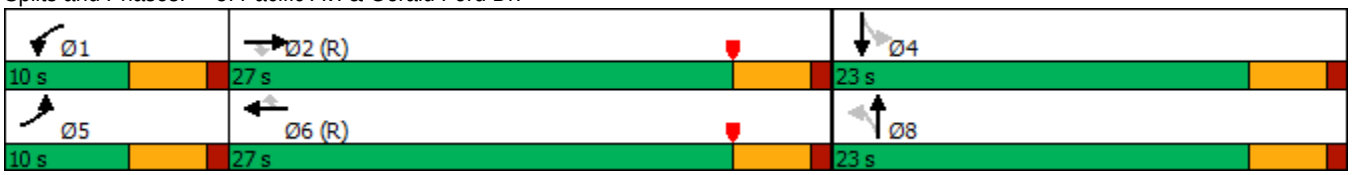
Notes

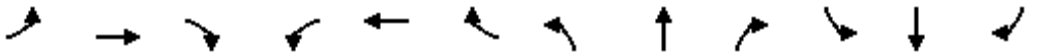
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	458	6	11	732	23	6	7	3	40	3	17
Future Volume (vph)	1	458	6	11	732	23	6	7	3	40	3	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	1	552	7	13	882	28	7	8	4	48	4	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	552	7	13	882	28	7	12	0	48	24	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0		23.0	23.0	
Total Split (%)	16.7%	45.0%	45.0%	16.7%	45.0%	45.0%	38.3%	38.3%		38.3%	38.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	458	6	11	732	23	6	7	3	40	3	17
Future Volume (veh/h)	1	458	6	11	732	23	6	7	3	40	3	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	552	7	13	882	28	7	8	4	48	4	20
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	2300	712	29	2376	735	533	727	335	547	548	486
Arrive On Green	0.00	0.15	0.15	0.02	0.47	0.47	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1580	1781	5106	1580	1381	2359	1086	1396	1777	1577
Grp Volume(v), veh/h	1	552	7	13	882	28	7	6	6	48	4	20
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1580	1381	1777	1669	1396	1777	1577
Q Serve(g_s), s	0.0	5.7	0.2	0.4	6.7	0.6	0.2	0.1	0.2	1.5	0.1	0.5
Cycle Q Clear(g_c), s	0.0	5.7	0.2	0.4	6.7	0.6	0.7	0.1	0.2	1.6	0.1	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	3	2300	712	29	2376	735	533	548	514	547	548	486
V/C Ratio(X)	0.34	0.24	0.01	0.45	0.37	0.04	0.01	0.01	0.01	0.09	0.01	0.04
Avail Cap(c_a), veh/h	163	2300	712	163	2376	735	533	548	514	547	548	486
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	16.5	14.1	29.2	10.4	8.7	14.8	14.4	14.4	15.0	14.4	14.5
Incr Delay (d2), s/veh	46.6	0.2	0.0	10.5	0.4	0.1	0.0	0.0	0.0	0.3	0.0	0.2
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	0.1	1.9	0.1	0.3	2.1	0.2	0.1	0.1	0.1	0.5	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.6	16.7	14.2	39.8	10.8	8.8	14.8	14.4	14.4	15.3	14.4	14.7
LnGrp LOS	E	B	B	D	B	A	B	B	B	B	B	B
Approach Vol, veh/h		560			923			19			72	
Approach Delay, s/veh		16.7			11.2			14.6			15.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	31.5		23.0	4.6	32.4		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		18.5	5.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	2.4	7.7		3.6	2.0	8.7		2.7				
Green Ext Time (p_c), s	0.0	2.9		0.2	0.0	4.9		0.0				

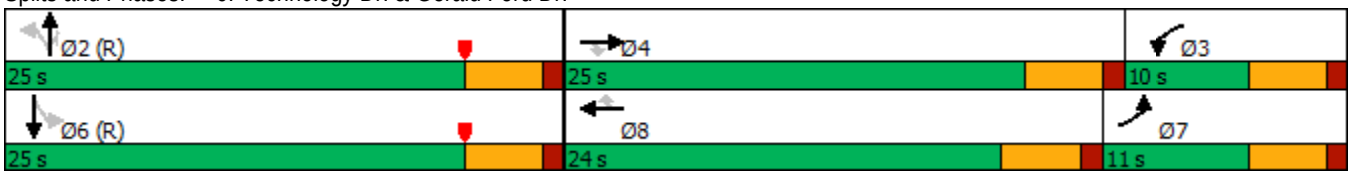
Intersection Summary			
HCM 6th Ctrl Delay		13.4	
HCM 6th LOS		B	

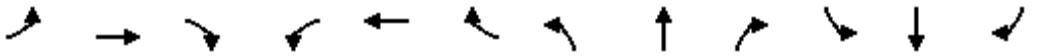
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	412	48	15	705	46	24	24	21	66	19	38
Future Volume (vph)	41	412	48	15	705	46	24	24	21	66	19	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	49	496	58	18	849	55	29	29	25	80	23	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	496	58	18	849	55	29	29	25	80	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	11.0	25.0	25.0	10.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	18.3%	41.7%	41.7%	16.7%	40.0%	40.0%	41.7%	41.7%	41.7%	41.7%	41.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	412	48	15	705	46	24	24	21	66	19	38
Future Volume (veh/h)	41	412	48	15	705	46	24	24	21	66	19	38
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	496	58	18	849	55	29	29	25	80	23	46
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	909	278	201	1247	383	734	906	765	761	269	538
Arrive On Green	0.05	0.18	0.18	0.15	0.32	0.32	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1781	5106	1563	1781	5106	1569	1328	1870	1580	1346	555	1111
Grp Volume(v), veh/h	49	496	58	18	849	55	29	29	25	80	0	69
Grp Sat Flow(s),veh/h/ln	1781	1702	1563	1781	1702	1569	1328	1870	1580	1346	0	1666
Q Serve(g_s), s	1.6	5.3	1.9	0.5	8.6	1.5	0.7	0.5	0.5	2.0	0.0	1.3
Cycle Q Clear(g_c), s	1.6	5.3	1.9	0.5	8.6	1.5	2.1	0.5	0.5	2.5	0.0	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	83	909	278	201	1247	383	734	906	765	761	0	807
V/C Ratio(X)	0.59	0.55	0.21	0.09	0.68	0.14	0.04	0.03	0.03	0.11	0.00	0.09
Avail Cap(c_a), veh/h	193	1745	534	201	1659	510	734	906	765	761	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	22.4	21.0	22.9	18.2	15.8	8.9	8.1	8.1	8.8	0.0	8.3
Incr Delay (d2), s/veh	6.6	0.5	0.4	0.2	0.6	0.1	0.1	0.1	0.1	0.3	0.0	0.2
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	0.8	1.9	0.7	0.2	2.8	0.5	0.2	0.2	0.2	0.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	23.0	21.4	23.0	18.8	16.0	9.0	8.2	8.2	9.0	0.0	8.5
LnGrp LOS	C	C	C	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		603			922			83			149	
Approach Delay, s/veh		23.8			18.7			8.5			8.8	
Approach LOS		C			B			A			A	

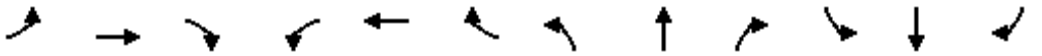
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		33.6	11.3	15.2		33.6	7.3	19.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	5.5	20.5		20.5	6.5	19.5				
Max Q Clear Time (g_c+I1), s		4.1	2.5	7.3		4.5	3.6	10.6				
Green Ext Time (p_c), s		0.2	0.0	2.7		0.5	0.0	3.7				

Intersection Summary												
HCM 6th Ctrl Delay			19.1									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	127	121	32	251	126	133	547	31	183	1433	392
Future Volume (vph)	278	127	121	32	251	126	133	547	31	183	1433	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	331	151	144	38	299	150	158	651	37	218	1706	467
Shared Lane Traffic (%)												
Lane Group Flow (vph)	331	151	144	38	299	150	158	651	37	218	1706	467
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	36.5		9.5	23.0	23.0	15.0	56.0	56.0	18.0	59.0	59.0
Total Split (%)	19.2%	30.4%		7.9%	19.2%	19.2%	12.5%	46.7%	46.7%	15.0%	49.2%	49.2%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	127	121	32	251	126	133	547	31	183	1433	392
Future Volume (veh/h)	278	127	121	32	251	126	133	547	31	183	1433	392
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	331	151	0	38	299	150	158	651	37	218	1706	467
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	740		103	438	193	215	2713	840	278	2807	869
Arrive On Green	0.11	0.21	0.00	0.03	0.12	0.12	0.06	0.53	0.53	0.08	0.55	0.55
Sat Flow, veh/h	3456	3554	1585	3456	3554	1566	3456	5106	1581	3456	5106	1581
Grp Volume(v), veh/h	331	151	0	38	299	150	158	651	37	218	1706	467
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1566	1728	1702	1581	1728	1702	1581
Q Serve(g_s), s	11.3	4.2	0.0	1.3	9.7	11.1	5.4	8.2	1.3	7.4	27.1	22.7
Cycle Q Clear(g_c), s	11.3	4.2	0.0	1.3	9.7	11.1	5.4	8.2	1.3	7.4	27.1	22.7
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	397	740		103	438	193	215	2713	840	278	2807	869
V/C Ratio(X)	0.83	0.20		0.37	0.68	0.78	0.73	0.24	0.04	0.78	0.61	0.54
Avail Cap(c_a), veh/h	533	948		144	548	241	302	2713	840	389	2807	869
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)	0.98	0.98	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	39.3	0.0	57.1	50.4	51.0	55.3	15.1	13.5	54.1	18.3	17.3
Incr Delay (d2), s/veh	8.1	0.1	0.0	2.2	2.5	11.9	5.5	0.2	0.1	6.8	1.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.8	0.0	0.6	4.3	4.9	2.4	2.9	0.5	3.4	9.7	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.1	39.4	0.0	59.3	52.9	62.9	60.8	15.3	13.6	60.9	19.3	19.7
LnGrp LOS	E	D		E	D	E	E	B	B	E	B	B
Approach Vol, veh/h		482	A		487			846			2391	
Approach Delay, s/veh		53.6			56.5			23.7			23.1	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	68.3	8.1	29.5	12.0	70.5	18.3	19.3
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	13.5	51.5	5.0	32.0	10.5	54.5	18.5	18.5
Max Q Clear Time (g_c+I1), s	9.4	10.2	3.3	6.2	7.4	29.1	13.3	13.1
Green Ext Time (p_c), s	0.2	4.3	0.0	0.8	0.1	15.0	0.5	1.0

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

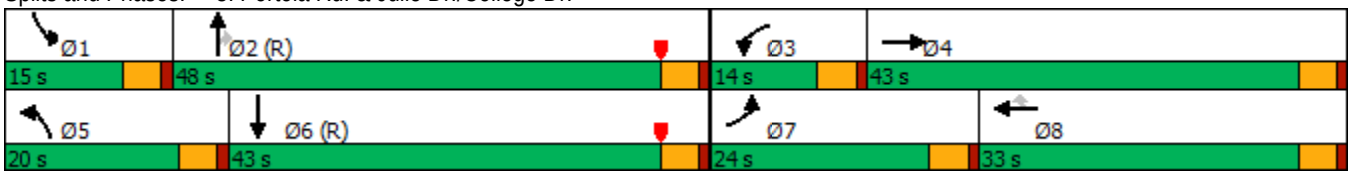
Notes

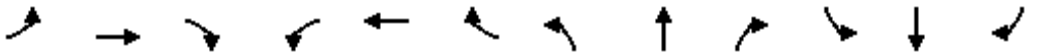
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	54	107	6	19	8	38	438	19	10	402	38
Future Volume (vph)	48	54	107	6	19	8	38	438	19	10	402	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		60	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1594			463			3682			1684	
Travel Time (s)		36.2			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	54	61	120	7	21	9	43	492	21	11	452	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	181	0	7	21	9	43	492	21	11	495	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	24.0	43.0		14.0	33.0	33.0	20.0	48.0	48.0	15.0	43.0	
Total Split (%)	20.0%	35.8%		11.7%	27.5%	27.5%	16.7%	40.0%	40.0%	12.5%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	54	107	6	19	8	38	438	19	10	402	38
Future Volume (veh/h)	48	54	107	6	19	8	38	438	19	10	402	38
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	61	120	7	21	9	43	492	21	11	452	43
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	2	2	2	2	2	2
Cap, veh/h	70	75	148	15	194	162	57	3544	1096	23	3205	301
Arrive On Green	0.04	0.13	0.13	0.01	0.10	0.10	0.03	0.69	0.69	0.03	1.00	1.00
Sat Flow, veh/h	1781	559	1099	1781	1870	1562	1781	5106	1579	1781	4747	445
Grp Volume(v), veh/h	54	0	181	7	21	9	43	492	21	11	322	173
Grp Sat Flow(s),veh/h/ln	1781	0	1658	1781	1870	1562	1781	1702	1579	1781	1702	1788
Q Serve(g_s), s	3.6	0.0	12.7	0.5	1.2	0.6	2.9	3.9	0.5	0.7	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	12.7	0.5	1.2	0.6	2.9	3.9	0.5	0.7	0.0	0.0
Prop In Lane	1.00		0.66	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	70	0	223	15	194	162	57	3544	1096	23	2298	1207
V/C Ratio(X)	0.77	0.00	0.81	0.45	0.11	0.06	0.76	0.14	0.02	0.48	0.14	0.14
Avail Cap(c_a), veh/h	289	0	532	141	444	371	230	3544	1096	156	2298	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.97	0.97	0.97
Uniform Delay (d), s/veh	57.1	0.0	50.5	59.2	48.8	48.5	57.6	6.2	5.7	58.1	0.0	0.0
Incr Delay (d2), s/veh	15.9	0.0	7.0	19.3	0.2	0.1	18.3	0.1	0.0	14.5	0.1	0.2
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	1.9	0.0	5.7	0.3	0.6	0.3	1.5	1.2	0.2	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	0.0	57.4	78.5	49.0	48.6	76.0	6.3	5.7	72.6	0.1	0.2
LnGrp LOS	E	A	E	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		235			37			556			506	
Approach Delay, s/veh		61.0			54.5			11.7			1.7	
Approach LOS		E			D			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	87.8	5.5	20.6	8.3	85.5	9.2	16.9
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	43.5	9.5	38.5	15.5	38.5	19.5	28.5
Max Q Clear Time (g_c+I1), s	2.7	5.9	2.5	14.7	4.9	2.0	5.6	3.2
Green Ext Time (p_c), s	0.0	3.1	0.0	1.1	0.0	2.8	0.1	0.1

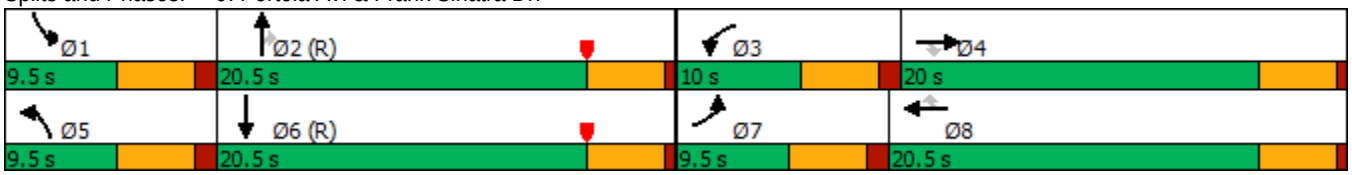
Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

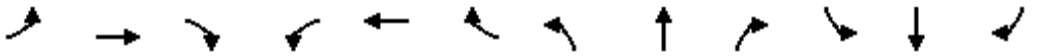
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	295	127	144	659	26	131	440	72	54	411	50
Future Volume (vph)	29	295	127	144	659	26	131	440	72	54	411	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	33	335	144	164	749	30	149	500	82	61	467	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	335	144	164	749	30	149	500	82	61	524	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.5	20.0	20.0	10.0	20.5	20.5	9.5	20.5	20.5	9.5	20.5	
Total Split (%)	15.8%	33.3%	33.3%	16.7%	34.2%	34.2%	15.8%	34.2%	34.2%	15.8%	34.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	295	127	144	659	26	131	440	72	54	411	50
Future Volume (veh/h)	29	295	127	144	659	26	131	440	72	54	411	50
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	335	144	164	749	30	149	500	82	61	467	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	699	309	163	900	399	148	1915	592	95	1593	191
Arrive On Green	0.04	0.20	0.20	0.09	0.25	0.25	0.08	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1781	3554	1573	1781	3554	1576	1781	5106	1579	1781	4618	554
Grp Volume(v), veh/h	33	335	144	164	749	30	149	500	82	61	342	182
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1576	1781	1702	1579	1781	1702	1768
Q Serve(g_s), s	1.1	5.0	4.9	5.5	12.0	0.9	5.0	4.1	2.1	2.0	4.4	4.5
Cycle Q Clear(g_c), s	1.1	5.0	4.9	5.5	12.0	0.9	5.0	4.1	2.1	2.0	4.4	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	63	699	309	163	900	399	148	1915	592	95	1174	610
V/C Ratio(X)	0.53	0.48	0.47	1.00	0.83	0.08	1.00	0.26	0.14	0.64	0.29	0.30
Avail Cap(c_a), veh/h	148	948	419	163	977	433	148	1915	592	148	1174	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	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Uniform Delay (d), s/veh	28.4	21.4	21.3	27.3	21.2	17.1	27.5	13.0	12.4	27.8	14.3	14.3
Incr Delay (d2), s/veh	6.7	0.5	1.1	71.6	5.9	0.1	74.9	0.3	0.5	7.0	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	1.6	5.3	4.8	0.3	4.9	1.2	0.7	0.9	1.4	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	21.9	22.4	98.8	27.1	17.1	102.4	13.3	12.8	34.9	14.9	15.6
LnGrp LOS	D	C	C	F	C	B	F	B	B	C	B	B
Approach Vol, veh/h		512			943			731			585	
Approach Delay, s/veh		22.9			39.2			31.4			17.2	
Approach LOS		C			D			C			B	

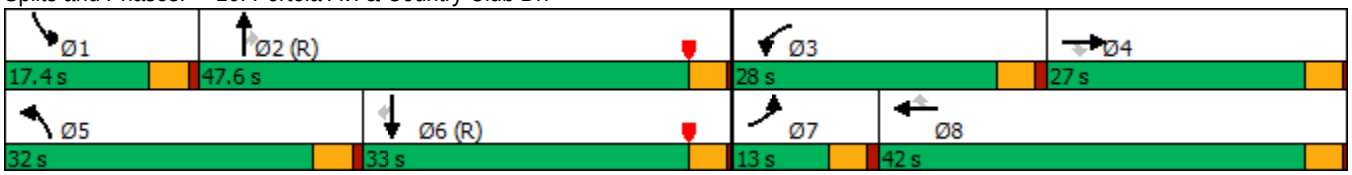
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	26.5	10.0	15.8	9.5	24.7	6.6	19.2
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.0	16.5	5.5	16.0	5.0	16.5	5.0	16.5
Max Q Clear Time (g_c+I1), s	4.0	6.1	7.5	7.0	7.0	6.5	3.1	14.0
Green Ext Time (p_c), s	0.0	2.3	0.0	1.6	0.0	2.0	0.0	1.2

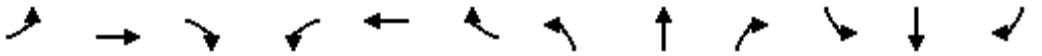
Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	395	167	177	756	94	219	459	148	79	488	51
Future Volume (vph)	47	395	167	177	756	94	219	459	148	79	488	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	55	465	196	208	889	111	258	540	174	93	574	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	465	196	208	889	111	258	540	174	93	574	60
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	13.0	27.0	27.0	28.0	42.0	42.0	32.0	47.6	47.6	17.4	33.0	33.0
Total Split (%)	10.8%	22.5%	22.5%	23.3%	35.0%	35.0%	26.7%	39.7%	39.7%	14.5%	27.5%	27.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	395	167	177	756	94	219	459	148	79	488	51
Future Volume (veh/h)	47	395	167	177	756	94	219	459	148	79	488	51
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	465	196	208	889	111	258	540	174	93	574	60
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	674	298	238	1008	447	289	1668	741	117	1324	588
Arrive On Green	0.04	0.19	0.19	0.13	0.28	0.28	0.16	0.47	0.47	0.07	0.37	0.37
Sat Flow, veh/h	1781	3554	1573	1781	3554	1577	1781	3554	1580	1781	3554	1579
Grp Volume(v), veh/h	55	465	196	208	889	111	258	540	174	93	574	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1577	1781	1777	1580	1781	1777	1579
Q Serve(g_s), s	3.7	14.6	13.8	13.7	28.7	6.5	17.0	11.4	7.9	6.2	14.5	3.0
Cycle Q Clear(g_c), s	3.7	14.6	13.8	13.7	28.7	6.5	17.0	11.4	7.9	6.2	14.5	3.0
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	71	674	298	238	1008	447	289	1668	741	117	1324	588
V/C Ratio(X)	0.78	0.69	0.66	0.87	0.88	0.25	0.89	0.32	0.23	0.80	0.43	0.10
Avail Cap(c_a), veh/h	126	681	301	349	1125	499	408	1668	741	191	1324	588
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	57.1	45.3	45.0	51.0	41.1	33.1	49.2	19.9	19.0	55.3	28.2	24.5
Incr Delay (d2), s/veh	16.3	2.9	5.1	15.1	7.8	0.3	16.4	0.5	0.7	11.5	1.0	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	1.9	6.5	5.6	6.9	13.0	2.4	8.5	4.5	2.9	3.0	6.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	48.2	50.1	66.1	48.9	33.4	65.6	20.4	19.7	66.8	29.2	24.9
LnGrp LOS	E	D	D	E	D	C	E	C	B	E	C	C
Approach Vol, veh/h		716			1208			972			727	
Approach Delay, s/veh		50.7			50.4			32.3			33.7	
Approach LOS		D			D			C			C	

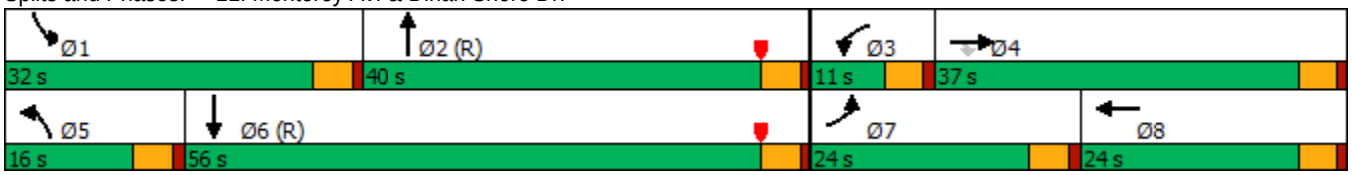
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	60.3	20.5	26.8	24.0	48.7	9.3	38.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	12.9	43.6	23.5	23.0	27.5	29.0	8.5	38.0
Max Q Clear Time (g_c+I1), s	8.2	13.4	15.7	16.6	19.0	16.5	5.7	30.7
Green Ext Time (p_c), s	0.1	3.8	0.3	1.8	0.4	2.8	0.0	3.4

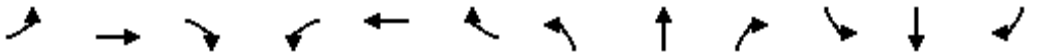
Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	235	194	56	229	308	147	425	20	429	1336	348
Future Volume (vph)	279	235	194	56	229	308	147	425	20	429	1336	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	310	261	216	62	254	342	163	472	22	477	1484	387
Shared Lane Traffic (%)												
Lane Group Flow (vph)	310	261	216	62	254	342	163	494	0	477	1484	387
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.0	37.0	37.0	11.0	24.0		16.0	40.0		32.0	56.0	
Total Split (%)	20.0%	30.8%	30.8%	9.2%	20.0%		13.3%	33.3%		26.7%	46.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.





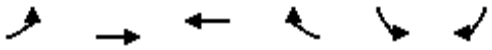
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	235	194	56	229	308	147	425	20	429	1336	348
Future Volume (veh/h)	279	235	194	56	229	308	147	425	20	429	1336	348
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	310	261	216	62	254	0	163	472	22	477	1484	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	622	275	126	363		221	2389	111	556	2933	
Arrive On Green	0.11	0.18	0.18	0.04	0.10	0.00	0.06	0.48	0.48	0.16	0.57	0.00
Sat Flow, veh/h	3456	3554	1571	3456	3554	1585	3456	5000	231	3456	5106	1585
Grp Volume(v), veh/h	310	261	216	62	254	0	163	320	174	477	1484	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1571	1728	1777	1585	1728	1702	1828	1728	1702	1585
Q Serve(g_s), s	10.5	7.8	15.8	2.1	8.3	0.0	5.6	6.5	6.6	16.1	20.9	0.0
Cycle Q Clear(g_c), s	10.5	7.8	15.8	2.1	8.3	0.0	5.6	6.5	6.6	16.1	20.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	378	622	275	126	363		221	1626	873	556	2933	
V/C Ratio(X)	0.82	0.42	0.79	0.49	0.70		0.74	0.20	0.20	0.86	0.51	
Avail Cap(c_a), veh/h	562	962	426	187	577		331	1626	873	792	2933	
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	52.3	44.1	47.3	56.7	52.1	0.0	55.2	18.1	18.1	49.0	15.3	0.0
Incr Delay (d2), s/veh	6.0	0.5	5.2	3.0	2.5	0.0	4.7	0.3	0.5	6.7	0.6	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	4.8	3.4	6.4	1.0	3.7	0.0	2.5	2.4	2.7	7.1	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.3	44.5	52.5	59.7	54.6	0.0	59.9	18.3	18.6	55.7	15.9	0.0
LnGrp LOS	E	D	D	E	D		E	B	B	E	B	
Approach Vol, veh/h		787			316	A		657			1961	A
Approach Delay, s/veh		52.1			55.6			28.7			25.6	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	61.8	8.9	25.5	12.2	73.4	17.6	16.8
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	27.5	35.5	6.5	32.5	11.5	51.5	19.5	19.5
Max Q Clear Time (g_c+I1), s	18.1	8.6	4.1	17.8	7.6	22.9	12.5	10.3
Green Ext Time (p_c), s	1.2	2.7	0.0	1.9	0.2	11.3	0.6	0.9

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	123	70	25	35	75	44
Future Volume (vph)	123	70	25	35	75	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		254	1594		1667	
Travel Time (s)		5.8	36.2		37.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	76	27	38	82	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	210	65	0	130	0
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

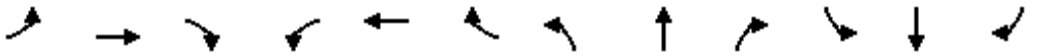
Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	210	65	130
Demand Flow Rate, veh/h	215	67	133
Vehicles Circulating, veh/h	84	137	28
Vehicles Exiting, veh/h	77	162	176
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.3	3.5	3.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	215	67	133
Cap Entry Lane, veh/h	1267	1200	1341
Entry HV Adj Factor	0.979	0.977	0.977
Flow Entry, veh/h	210	65	130
Cap Entry, veh/h	1240	1172	1311
V/C Ratio	0.170	0.056	0.099
Control Delay, s/veh	4.3	3.5	3.5
LOS	A	A	A
95th %tile Queue, veh	1	0	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	318	97	106	326	120	128	1168	117	97	925	109
Future Volume (vph)	135	318	97	106	326	120	128	1168	117	97	925	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	142	335	102	112	343	126	135	1229	123	102	974	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	335	102	112	343	126	135	1352	0	102	974	115
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	18.0	30.0	30.0	16.0	28.0	28.0	17.0	59.0		15.0	57.0	57.0
Total Split (%)	15.0%	25.0%	25.0%	13.3%	23.3%	23.3%	14.2%	49.2%		12.5%	47.5%	47.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	318	97	106	326	120	128	1168	117	97	925	109
Future Volume (veh/h)	135	318	97	106	326	120	128	1168	117	97	925	109
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	335	102	112	343	126	135	1229	123	102	974	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	495	218	168	461	203	193	2910	291	155	3096	
Arrive On Green	0.06	0.14	0.14	0.02	0.04	0.04	0.06	0.62	0.62	0.04	0.61	0.00
Sat Flow, veh/h	3456	3554	1568	3456	3554	1567	3456	4716	472	3456	5106	1585
Grp Volume(v), veh/h	142	335	102	112	343	126	135	887	465	102	974	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1568	1728	1777	1567	1728	1702	1784	1728	1702	1585
Q Serve(g_s), s	4.8	10.8	7.2	3.9	11.5	9.5	4.6	16.2	16.2	3.5	11.1	0.0
Cycle Q Clear(g_c), s	4.8	10.8	7.2	3.9	11.5	9.5	4.6	16.2	16.2	3.5	11.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	201	495	218	168	461	203	193	2101	1101	155	3096	
V/C Ratio(X)	0.71	0.68	0.47	0.67	0.74	0.62	0.70	0.42	0.42	0.66	0.31	
Avail Cap(c_a), veh/h	389	755	333	331	696	307	360	2101	1101	302	3096	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.5	49.1	47.6	58.1	55.5	54.5	55.7	11.9	11.9	56.4	11.5	0.0
Incr Delay (d2), s/veh	4.5	1.6	1.6	4.4	2.3	3.0	4.6	0.6	1.2	4.6	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	2.2	4.7	2.8	1.8	5.5	4.0	2.1	5.4	5.9	1.6	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	50.7	49.1	62.4	57.8	57.5	60.2	12.5	13.1	61.0	11.8	0.0
LnGrp LOS	E	D	D	E	E	E	E	B	B	E	B	
Approach Vol, veh/h		579			581			1487			1076	A
Approach Delay, s/veh		52.7			58.6			17.0			16.4	
Approach LOS		D			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	78.6	10.3	21.2	11.2	77.3	11.5	20.1
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	54.5	11.5	25.5	12.5	52.5	13.5	23.5
Max Q Clear Time (g_c+I1), s	5.5	18.2	5.9	12.8	6.6	13.1	6.8	13.5
Green Ext Time (p_c), s	0.1	9.9	0.1	1.8	0.2	6.9	0.2	1.7

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

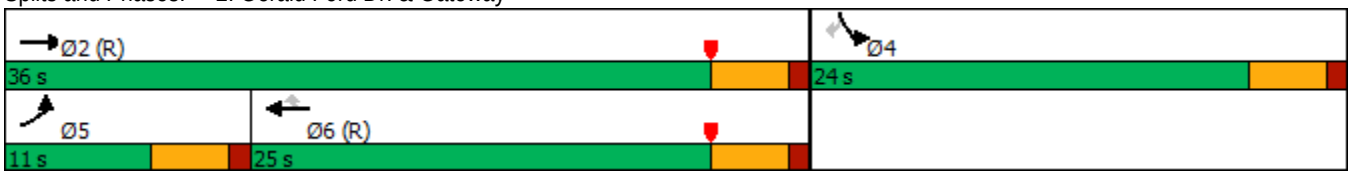
Notes

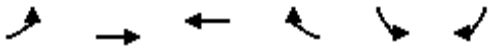
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	488	476	84	132	113
Future Volume (vph)	44	488	476	84	132	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	48	536	523	92	145	124
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	536	523	92	145	124
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	36.0	25.0	25.0	24.0	24.0
Total Split (%)	18.3%	60.0%	41.7%	41.7%	40.0%	40.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Gerald Ford Dr. & Gateway





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	488	476	84	132	113
Future Volume (veh/h)	44	488	476	84	132	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	536	523	92	145	124
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	82	1866	2063	637	579	515
Arrive On Green	0.05	0.52	0.40	0.40	0.32	0.32
Sat Flow, veh/h	1781	3647	5274	1575	1781	1585
Grp Volume(v), veh/h	48	536	523	92	145	124
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1575	1781	1585
Q Serve(g_s), s	1.6	5.1	4.1	2.2	3.6	3.4
Cycle Q Clear(g_c), s	1.6	5.1	4.1	2.2	3.6	3.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	82	1866	2063	637	579	515
V/C Ratio(X)	0.59	0.29	0.25	0.14	0.25	0.24
Avail Cap(c_a), veh/h	193	1866	2063	637	579	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	8.0	11.9	11.3	14.9	14.8
Incr Delay (d2), s/veh	5.2	0.3	0.3	0.5	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.4	1.2	0.7	1.5	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.3	8.3	12.2	11.8	15.9	15.9
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		584	615		269	
Approach Delay, s/veh		10.3	12.1		15.9	
Approach LOS		B	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.0		24.0	7.3	28.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		31.5		19.5	6.5	20.5
Max Q Clear Time (g_c+I1), s		7.1		5.6	3.6	6.1
Green Ext Time (p_c), s		3.2		0.7	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	487	136	98	447	41	84	1	60	20	2	24
Future Volume (vph)	41	487	136	98	447	41	84	1	60	20	2	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	43	513	143	103	471	43	88	1	63	21	2	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	656	0	103	471	43	0	89	63	0	23	25
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	487	136	98	447	41	84	1	60	20	2	24
Future Vol, veh/h	41	487	136	98	447	41	84	1	60	20	2	24
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	150	-	110	-	-	150	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	513	143	103	471	43	88	1	63	21	2	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	519	0	0	656	0	0	1071	1396	333	1030	1424	246
Stage 1	-	-	-	-	-	-	671	671	-	682	682	-
Stage 2	-	-	-	-	-	-	400	725	-	348	742	-
Critical Hdwy	5.34	-	-	4.14	-	-	6.99	6.54	6.94	6.99	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.54	5.54	-
Follow-up Hdwy	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92
Pot Cap-1 Maneuver	663	-	-	927	-	-	201	140	663	214	135	643
Stage 1	-	-	-	-	-	-	400	453	-	339	448	-
Stage 2	-	-	-	-	-	-	565	428	-	619	420	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	660	-	-	927	-	-	165	116	660	166	112	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	165	116	-	166	112	-
Stage 1	-	-	-	-	-	-	374	424	-	315	396	-
Stage 2	-	-	-	-	-	-	477	379	-	520	393	-

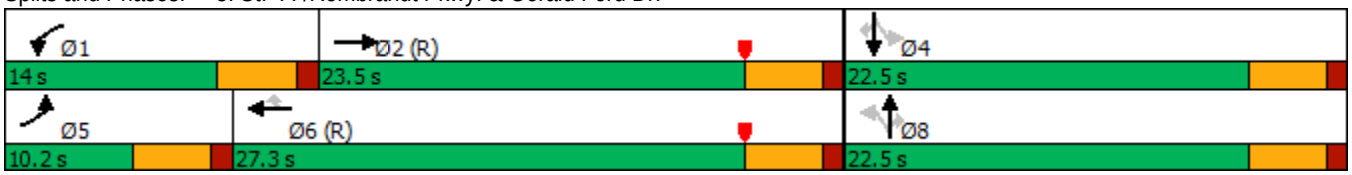
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.6	34.2	20.8
HCM LOS			D	C

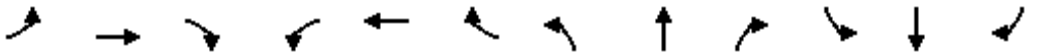
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	164	660	660	-	-	927	-	-	159	637
HCM Lane V/C Ratio	0.546	0.096	0.065	-	-	0.111	-	-	0.146	0.04
HCM Control Delay (s)	50.6	11	10.8	-	-	9.4	-	-	31.5	10.9
HCM Lane LOS	F	B	B	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	2.8	0.3	0.2	-	-	0.4	-	-	0.5	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	487	136	98	447	41	84	1	60	20	2	24
Future Volume (vph)	41	487	136	98	447	41	84	1	60	20	2	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	43	513	143	103	471	43	88	1	63	21	2	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	656	0	103	471	43	0	89	63	0	23	25
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.2	23.5		14.0	27.3	27.3	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	17.0%	39.2%		23.3%	45.5%	45.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: St. "A"/Rembrandt Pkwy. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	487	136	98	447	41	84	1	60	20	2	24
Future Volume (veh/h)	41	487	136	98	447	41	84	1	60	20	2	24
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	513	143	103	471	43	88	1	63	21	2	25
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1098	304	133	2208	681	119	1	476	115	6	473
Arrive On Green	0.01	0.13	0.13	0.07	0.43	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	2744	761	1781	5106	1576	0	2	1585	0	20	1577
Grp Volume(v), veh/h	43	331	325	103	471	43	89	0	63	23	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1728	1781	1702	1576	2	0	1585	20	0	1577
Q Serve(g_s), s	1.4	10.3	10.4	3.4	3.5	1.0	0.0	0.0	1.7	0.0	0.0	0.7
Cycle Q Clear(g_c), s	1.4	10.3	10.4	3.4	3.5	1.0	18.0	0.0	1.7	18.0	0.0	0.7
Prop In Lane	1.00		0.44	1.00		1.00	0.99		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	76	711	691	133	2208	681	120	0	476	121	0	473
V/C Ratio(X)	0.57	0.47	0.47	0.77	0.21	0.06	0.74	0.00	0.13	0.19	0.00	0.05
Avail Cap(c_a), veh/h	169	711	691	282	2208	681	120	0	476	121	0	473
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	20.1	20.1	27.3	10.6	9.9	29.9	0.0	15.3	25.4	0.0	14.9
Incr Delay (d2), s/veh	6.3	2.1	2.2	9.1	0.2	0.2	33.4	0.0	0.6	3.5	0.0	0.2
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	0.7	4.5	4.4	1.6	1.0	0.3	2.3	0.0	0.7	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	22.2	22.4	36.3	10.9	10.1	63.3	0.0	15.9	28.9	0.0	15.1
LnGrp LOS	D	C	C	D	B	B	E	A	B	C	A	B
Approach Vol, veh/h		699			617			152			48	
Approach Delay, s/veh		23.1			15.1			43.6			21.7	
Approach LOS		C			B			D			C	

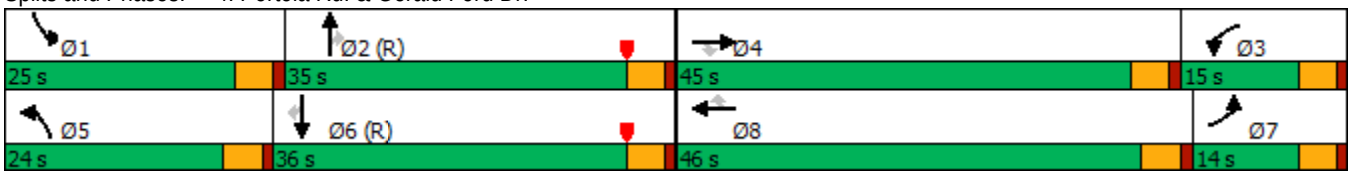
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	28.5		22.5	7.1	30.4		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	19.0		18.0	5.7	22.8		18.0				
Max Q Clear Time (g_c+I1), s	5.4	12.4		20.0	3.4	5.5		20.0				
Green Ext Time (p_c), s	0.1	2.0		0.0	0.0	2.7		0.0				

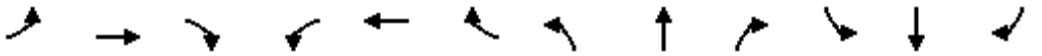
Intersection Summary												
HCM 6th Ctrl Delay			21.8									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	412	137	37	438	127	138	323	56	152	288	10
Future Volume (vph)	4	412	137	37	438	127	138	323	56	152	288	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	448	149	40	476	138	150	351	61	165	313	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	448	149	40	476	138	150	351	61	165	313	11
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	14.0	45.0	45.0	15.0	46.0	46.0	24.0	35.0	35.0	25.0	36.0	36.0
Total Split (%)	11.7%	37.5%	37.5%	12.5%	38.3%	38.3%	20.0%	29.2%	29.2%	20.8%	30.0%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	412	137	37	438	127	138	323	56	152	288	10
Future Volume (veh/h)	4	412	137	37	438	127	138	323	56	152	288	10
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	448	149	40	476	0	150	351	61	165	313	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	580	256	106	693		210	3012	933	229	3041	
Arrive On Green	0.06	0.16	0.16	0.01	0.04	0.00	0.12	1.00	1.00	0.07	0.60	0.00
Sat Flow, veh/h	1781	3554	1570	3456	5106	1585	3456	5106	1581	3456	5106	1585
Grp Volume(v), veh/h	4	448	149	40	476	0	150	351	61	165	313	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1570	1728	1702	1585	1728	1702	1581	1728	1702	1585
Q Serve(g_s), s	0.3	14.5	8.8	1.4	11.0	0.0	5.0	0.0	0.0	5.6	3.2	0.0
Cycle Q Clear(g_c), s	0.3	14.5	8.8	1.4	11.0	0.0	5.0	0.0	0.0	5.6	3.2	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	103	580	256	106	693		210	3012	933	229	3041	
V/C Ratio(X)	0.04	0.77	0.58	0.38	0.69		0.72	0.12	0.07	0.72	0.10	
Avail Cap(c_a), veh/h	141	1199	530	302	1766		562	3012	933	590	3041	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.4	48.1	32.6	58.3	54.8	0.0	51.7	0.0	0.0	54.9	10.5	0.0
Incr Delay (d2), s/veh	0.2	2.2	2.1	2.2	1.2	0.0	4.5	0.1	0.1	4.2	0.1	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	0.1	6.4	3.4	0.6	5.0	0.0	2.1	0.0	0.0	2.5	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	50.3	34.7	60.4	56.0	0.0	56.2	0.1	0.1	59.2	10.5	0.0
LnGrp LOS	D	D	C	E	E		E	A	A	E	B	
Approach Vol, veh/h		601			516	A		562			478	A
Approach Delay, s/veh		46.5			56.3			15.1			27.3	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	75.3	8.2	24.1	11.8	76.0	11.5	20.8
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	20.5	30.5	10.5	40.5	19.5	31.5	9.5	41.5
Max Q Clear Time (g_c+I1), s	7.6	2.0	3.4	16.5	7.0	5.2	2.3	13.0
Green Ext Time (p_c), s	0.4	2.2	0.0	3.1	0.3	1.8	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

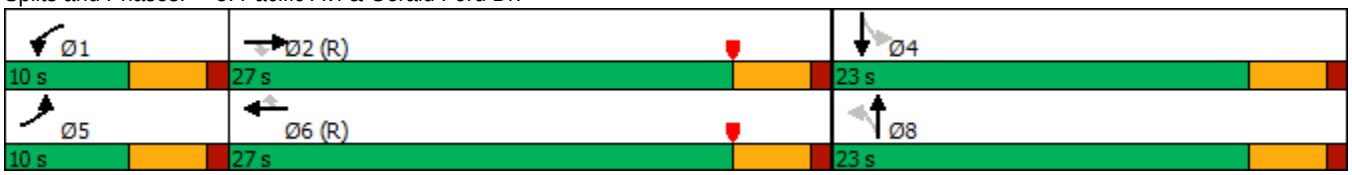
Notes

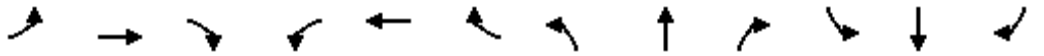
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	607	3	3	591	49	7	3	2	65	4	4
Future Volume (vph)	10	607	3	3	591	49	7	3	2	65	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	11	667	3	3	649	54	8	3	2	71	4	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	667	3	3	649	54	8	5	0	71	8	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	10.0	27.0	27.0	10.0	27.0	27.0	23.0	23.0		23.0	23.0	
Total Split (%)	16.7%	45.0%	45.0%	16.7%	45.0%	45.0%	38.3%	38.3%		38.3%	38.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	607	3	3	591	49	7	3	2	65	4	4
Future Volume (veh/h)	10	607	3	3	591	49	7	3	2	65	4	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	667	3	3	649	54	8	3	2	71	4	4
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	25	2362	731	7	2312	715	549	658	393	551	559	477
Arrive On Green	0.01	0.46	0.46	0.00	0.45	0.45	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1580	1781	5106	1580	1401	2135	1275	1404	1814	1546
Grp Volume(v), veh/h	11	667	3	3	649	54	8	2	3	71	4	4
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1580	1401	1777	1633	1404	1777	1583
Q Serve(g_s), s	0.4	4.8	0.1	0.1	4.8	1.2	0.2	0.1	0.1	2.2	0.1	0.1
Cycle Q Clear(g_c), s	0.4	4.8	0.1	0.1	4.8	1.2	0.3	0.1	0.1	2.3	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.78	1.00		0.98
Lane Grp Cap(c), veh/h	25	2362	731	7	2312	715	549	548	504	551	548	488
V/C Ratio(X)	0.44	0.28	0.00	0.41	0.28	0.08	0.01	0.00	0.01	0.13	0.01	0.01
Avail Cap(c_a), veh/h	163	2362	731	163	2312	715	549	548	504	551	548	488
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)	0.76	0.76	0.76	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	10.0	8.7	29.8	10.3	9.3	14.5	14.4	14.4	15.2	14.4	14.4
Incr Delay (d2), s/veh	9.1	0.2	0.0	33.7	0.3	0.2	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.4	0.0	0.1	1.5	0.4	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	10.2	8.7	63.5	10.6	9.5	14.6	14.4	14.4	15.6	14.4	14.4
LnGrp LOS	D	B	A	E	B	A	B	B	B	B	B	B
Approach Vol, veh/h		681			706			13			79	
Approach Delay, s/veh		10.6			10.7			14.5			15.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	32.3		23.0	5.3	31.7		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		18.5	5.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	2.1	6.8		4.3	2.4	6.8		2.3				
Green Ext Time (p_c), s	0.0	3.6		0.1	0.0	3.9		0.0				

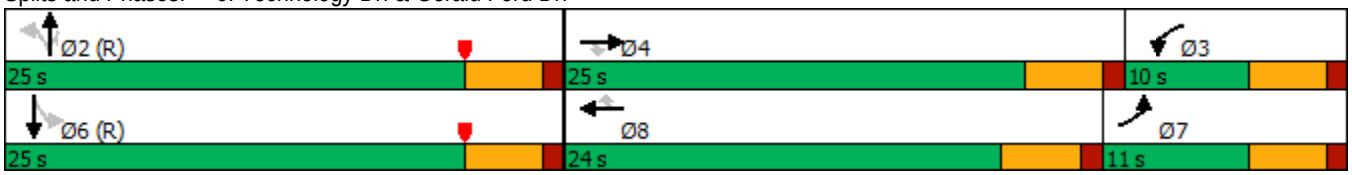
Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

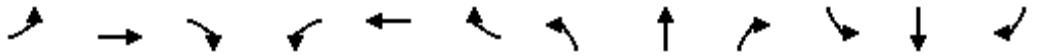
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	605	24	7	515	41	70	17	40	76	13	59
Future Volume (vph)	46	605	24	7	515	41	70	17	40	76	13	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	51	665	26	8	566	45	77	19	44	84	14	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	665	26	8	566	45	77	19	44	84	79	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	11.0	25.0	25.0	10.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	
Total Split (%)	18.3%	41.7%	41.7%	16.7%	40.0%	40.0%	41.7%	41.7%	41.7%	41.7%	41.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	605	24	7	515	41	70	17	40	76	13	59
Future Volume (veh/h)	46	605	24	7	515	41	70	17	40	76	13	59
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	665	26	8	566	45	77	19	44	84	14	65
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	85	1094	336	54	1006	308	787	992	838	822	153	709
Arrive On Green	0.05	0.21	0.21	0.01	0.07	0.07	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	5106	1567	1781	5106	1565	1317	1870	1581	1336	288	1337
Grp Volume(v), veh/h	51	665	26	8	566	45	77	19	44	84	0	79
Grp Sat Flow(s),veh/h/ln	1781	1702	1567	1781	1702	1565	1317	1870	1581	1336	0	1625
Q Serve(g_s), s	1.7	7.1	0.8	0.3	6.5	1.6	1.8	0.3	0.8	1.9	0.0	1.4
Cycle Q Clear(g_c), s	1.7	7.1	0.8	0.3	6.5	1.6	3.3	0.3	0.8	2.2	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	85	1094	336	54	1006	308	787	992	838	822	0	862
V/C Ratio(X)	0.60	0.61	0.08	0.15	0.56	0.15	0.10	0.02	0.05	0.10	0.00	0.09
Avail Cap(c_a), veh/h	193	1745	535	163	1659	509	787	992	838	822	0	862
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	21.3	18.8	28.9	25.5	23.3	7.8	6.7	6.8	7.2	0.0	7.0
Incr Delay (d2), s/veh	6.6	0.6	0.1	1.1	0.4	0.2	0.2	0.0	0.1	0.2	0.0	0.2
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	0.8	2.5	0.3	0.1	2.6	0.6	0.5	0.1	0.2	0.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	21.8	18.9	30.0	26.0	23.5	8.0	6.7	6.9	7.5	0.0	7.2
LnGrp LOS	C	C	B	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		742			619			140			163	
Approach Delay, s/veh		22.6			25.8			7.5			7.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		36.3	6.3	17.4		36.3	7.4	16.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.5	5.5	20.5		20.5	6.5	19.5				
Max Q Clear Time (g_c+I1), s		5.3	2.3	9.1		4.2	3.7	8.5				
Green Ext Time (p_c), s		0.3	0.0	3.3		0.5	0.0	2.8				

Intersection Summary		
HCM 6th Ctrl Delay		21.1
HCM 6th LOS		C

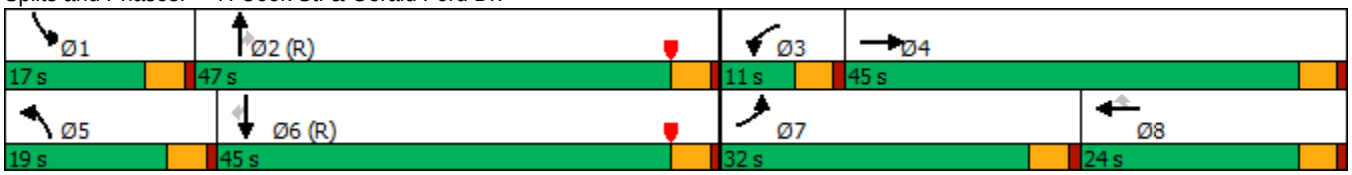
Notes

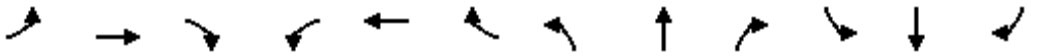
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	452	246	120	64	202	166	191	1043	28	170	699	207
Future Volume (vph)	452	246	120	64	202	166	191	1043	28	170	699	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	481	262	128	68	215	177	203	1110	30	181	744	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	481	262	128	68	215	177	203	1110	30	181	744	220
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	32.0	45.0		11.0	24.0	24.0	19.0	47.0	47.0	17.0	45.0	45.0
Total Split (%)	26.7%	37.5%		9.2%	20.0%	20.0%	15.8%	39.2%	39.2%	14.2%	37.5%	37.5%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	452	246	120	64	202	166	191	1043	28	170	699	207
Future Volume (veh/h)	452	246	120	64	202	166	191	1043	28	170	699	207
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	481	262	0	68	215	177	203	1110	30	181	744	220
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	553	917		129	481	212	265	2477	767	240	2442	756
Arrive On Green	0.27	0.43	0.00	0.04	0.14	0.14	0.08	0.49	0.49	0.07	0.48	0.48
Sat Flow, veh/h	3456	3554	1585	3456	3554	1567	3456	5106	1580	3456	5106	1580
Grp Volume(v), veh/h	481	262	0	68	215	177	203	1110	30	181	744	220
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1567	1728	1702	1580	1728	1702	1580
Q Serve(g_s), s	15.9	5.7	0.0	2.3	6.7	13.2	6.9	17.2	1.2	6.2	10.7	10.1
Cycle Q Clear(g_c), s	15.9	5.7	0.0	2.3	6.7	13.2	6.9	17.2	1.2	6.2	10.7	10.1
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	553	917		129	481	212	265	2477	767	240	2442	756
V/C Ratio(X)	0.87	0.29		0.53	0.45	0.83	0.77	0.45	0.04	0.75	0.30	0.29
Avail Cap(c_a), veh/h	792	1199		187	577	255	418	2477	767	360	2442	756
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	27.0	0.0	56.7	47.8	50.6	54.4	20.3	16.2	54.8	19.1	19.0
Incr Delay (d2), s/veh	7.0	0.2	0.0	3.3	0.7	18.0	4.6	0.6	0.1	4.8	0.3	1.0
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	6.4	2.3	0.0	1.0	2.9	6.1	3.1	6.3	0.4	2.7	4.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	27.1	0.0	60.0	48.4	68.6	59.0	20.9	16.3	59.6	19.4	20.0
LnGrp LOS	D	C		E	D	E	E	C	B	E	B	B
Approach Vol, veh/h		743	A		460			1343			1145	
Approach Delay, s/veh		41.8			57.9			26.6			25.9	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	62.7	9.0	35.5	13.7	61.9	23.7	20.7
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	12.5	42.5	6.5	40.5	14.5	40.5	27.5	19.5
Max Q Clear Time (g_c+I1), s	8.2	19.2	4.3	7.7	8.9	12.7	17.9	15.2
Green Ext Time (p_c), s	0.2	7.3	0.0	1.6	0.3	5.5	1.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

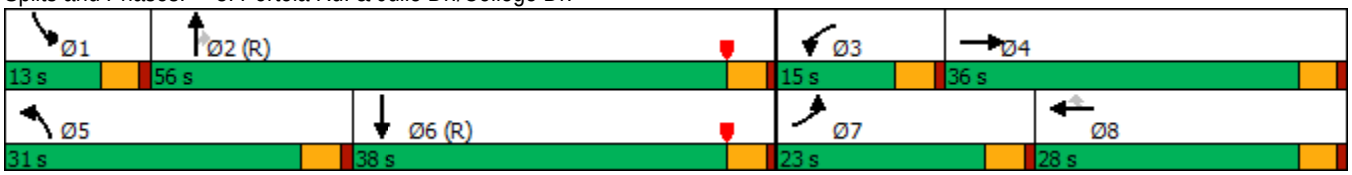
Notes

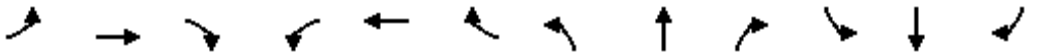
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	36	67	14	41	6	100	443	10	6	391	65
Future Volume (vph)	66	36	67	14	41	6	100	443	10	6	391	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		60	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1594			463			3682			1684	
Travel Time (s)		36.2			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	39	73	15	45	7	109	482	11	7	425	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	112	0	15	45	7	109	482	11	7	496	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	23.0	36.0		15.0	28.0	28.0	31.0	56.0	56.0	13.0	38.0	
Total Split (%)	19.2%	30.0%		12.5%	23.3%	23.3%	25.8%	46.7%	46.7%	10.8%	31.7%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	36	67	14	41	6	100	443	10	6	391	65
Future Volume (veh/h)	66	36	67	14	41	6	100	443	10	6	391	65
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		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	39	73	15	45	7	109	482	11	7	425	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	56	104	29	114	94	136	3718	1150	15	2919	476
Arrive On Green	0.05	0.10	0.10	0.02	0.06	0.06	0.08	0.73	0.73	0.02	1.00	1.00
Sat Flow, veh/h	1781	577	1079	1781	1870	1546	1781	5106	1580	1781	4421	721
Grp Volume(v), veh/h	72	0	112	15	45	7	109	482	11	7	325	171
Grp Sat Flow(s),veh/h/ln	1781	0	1656	1781	1870	1546	1781	1702	1580	1781	1702	1737
Q Serve(g_s), s	4.8	0.0	7.9	1.0	2.8	0.5	7.2	3.4	0.2	0.5	0.0	0.0
Cycle Q Clear(g_c), s	4.8	0.0	7.9	1.0	2.8	0.5	7.2	3.4	0.2	0.5	0.0	0.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	93	0	160	29	114	94	136	3718	1150	15	2248	1147
V/C Ratio(X)	0.77	0.00	0.70	0.51	0.40	0.07	0.80	0.13	0.01	0.45	0.14	0.15
Avail Cap(c_a), veh/h	275	0	435	156	366	303	393	3718	1150	126	2248	1147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.99	0.99	0.99
Uniform Delay (d), s/veh	56.2	0.0	52.5	58.5	54.2	53.2	54.5	4.9	4.5	58.7	0.0	0.0
Incr Delay (d2), s/veh	12.7	0.0	5.4	13.3	2.2	0.3	10.0	0.1	0.0	19.2	0.1	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	2.5	0.0	3.5	0.6	1.4	0.2	3.5	0.9	0.1	0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.9	0.0	57.9	71.8	56.4	53.5	64.5	5.0	4.5	77.8	0.1	0.3
LnGrp LOS	E	A	E	E	E	D	E	A	A	E	A	A
Approach Vol, veh/h		184			67			602			503	
Approach Delay, s/veh		62.2			59.6			15.7			1.3	
Approach LOS		E			E			B			A	

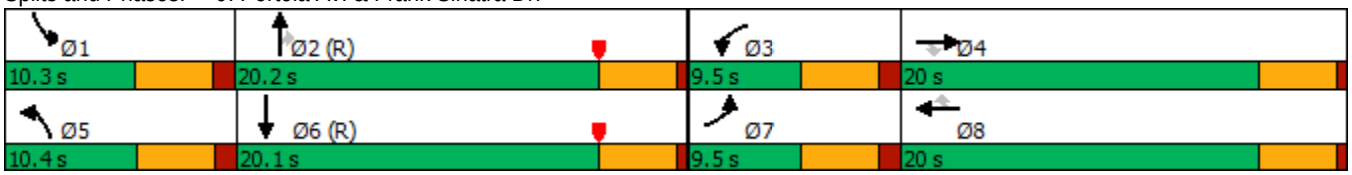
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	91.9	6.5	16.1	13.7	83.7	10.8	11.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	51.5	10.5	31.5	26.5	33.5	18.5	23.5
Max Q Clear Time (g_c+I1), s	2.5	5.4	3.0	9.9	9.2	2.0	6.8	4.8
Green Ext Time (p_c), s	0.0	3.1	0.0	0.6	0.2	2.8	0.1	0.2

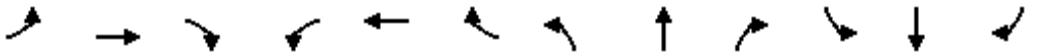
Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	633	91	99	391	33	144	477	110	86	337	50
Future Volume (vph)	43	633	91	99	391	33	144	477	110	86	337	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	46	673	97	105	416	35	153	507	117	91	359	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	673	97	105	416	35	153	507	117	91	412	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	10.4	20.2	20.2	10.3	20.1	
Total Split (%)	15.8%	33.3%	33.3%	15.8%	33.3%	33.3%	17.3%	33.7%	33.7%	17.2%	33.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	633	91	99	391	33	144	477	110	86	337	50
Future Volume (veh/h)	43	633	91	99	391	33	144	477	110	86	337	50
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	673	97	105	416	35	153	507	117	91	359	53
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	843	374	134	952	422	175	1729	534	117	1377	198
Arrive On Green	0.04	0.24	0.24	0.08	0.27	0.27	0.10	0.34	0.34	0.07	0.31	0.31
Sat Flow, veh/h	1781	3554	1575	1781	3554	1576	1781	5106	1578	1781	4505	648
Grp Volume(v), veh/h	46	673	97	105	416	35	153	507	117	91	269	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1575	1781	1777	1576	1781	1702	1578	1781	1702	1750
Q Serve(g_s), s	1.5	10.7	3.0	3.5	5.8	1.0	5.1	4.4	3.2	3.0	3.6	3.7
Cycle Q Clear(g_c), s	1.5	10.7	3.0	3.5	5.8	1.0	5.1	4.4	3.2	3.0	3.6	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	79	843	374	134	952	422	175	1729	534	117	1041	535
V/C Ratio(X)	0.58	0.80	0.26	0.78	0.44	0.08	0.87	0.29	0.22	0.78	0.26	0.27
Avail Cap(c_a), veh/h	148	948	420	148	952	422	175	1729	534	172	1041	535
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	0.99	0.99	0.99
Uniform Delay (d), s/veh	28.1	21.5	18.6	27.3	18.2	16.4	26.7	14.6	14.2	27.6	15.7	15.7
Incr Delay (d2), s/veh	6.5	4.4	0.4	21.4	0.3	0.1	35.2	0.4	0.9	12.6	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.2	1.0	2.1	2.0	0.3	3.6	1.4	1.0	1.5	1.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	25.9	19.0	48.6	18.5	16.5	61.8	15.0	15.1	40.2	16.3	17.0
LnGrp LOS	C	C	B	D	B	B	E	B	B	D	B	B
Approach Vol, veh/h		816			556			777			503	
Approach Delay, s/veh		25.6			24.1			24.2			20.8	
Approach LOS		C			C			C			C	

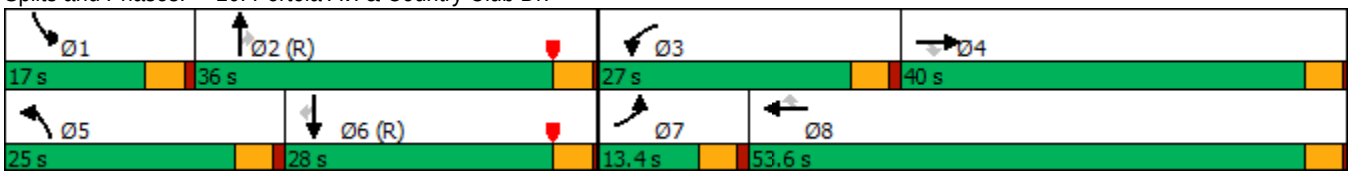
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	24.3	9.0	18.2	10.4	22.3	7.2	20.1
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.8	16.2	5.0	16.0	5.9	16.1	5.0	16.0
Max Q Clear Time (g_c+I1), s	5.0	6.4	5.5	12.7	7.1	5.7	3.5	7.8
Green Ext Time (p_c), s	0.0	2.4	0.0	1.4	0.0	1.6	0.0	1.6

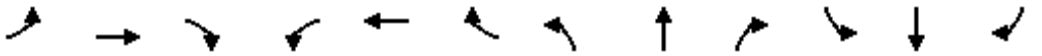
Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	818	185	195	586	142	180	521	188	84	435	60
Future Volume (vph)	48	818	185	195	586	142	180	521	188	84	435	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	49	843	191	201	604	146	186	537	194	87	448	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	843	191	201	604	146	186	537	194	87	448	62
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	13.4	40.0	40.0	27.0	53.6	53.6	25.0	36.0	36.0	17.0	28.0	28.0
Total Split (%)	11.2%	33.3%	33.3%	22.5%	44.7%	44.7%	20.8%	30.0%	30.0%	14.2%	23.3%	23.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	818	185	195	586	142	180	521	188	84	435	60
Future Volume (veh/h)	48	818	185	195	586	142	180	521	188	84	435	60
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	843	191	201	604	146	186	537	194	87	448	62
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	960	426	231	1294	575	215	1410	627	110	1200	533
Arrive On Green	0.04	0.27	0.27	0.13	0.36	0.36	0.12	0.40	0.40	0.06	0.34	0.34
Sat Flow, veh/h	1781	3554	1576	1781	3554	1579	1781	3554	1579	1781	3554	1578
Grp Volume(v), veh/h	49	843	191	201	604	146	186	537	194	87	448	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1781	1777	1579	1781	1777	1579	1781	1777	1578
Q Serve(g_s), s	3.3	27.2	12.1	13.3	15.6	7.8	12.3	12.9	10.1	5.8	11.5	3.2
Cycle Q Clear(g_c), s	3.3	27.2	12.1	13.3	15.6	7.8	12.3	12.9	10.1	5.8	11.5	3.2
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	63	960	426	231	1294	575	215	1410	627	110	1200	533
V/C Ratio(X)	0.78	0.88	0.45	0.87	0.47	0.25	0.86	0.38	0.31	0.79	0.37	0.12
Avail Cap(c_a), veh/h	132	1066	473	334	1469	652	304	1410	627	186	1200	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	41.9	36.4	51.2	29.2	26.7	51.8	25.7	24.9	55.5	30.1	27.4
Incr Delay (d2), s/veh	18.0	7.9	0.7	15.5	0.3	0.2	16.4	0.8	1.3	11.9	0.9	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	1.7	12.4	4.6	6.7	6.4	2.8	6.2	5.2	3.8	2.9	4.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	49.9	37.1	66.8	29.5	27.0	68.2	26.5	26.2	67.4	31.0	27.8
LnGrp LOS	E	D	D	E	C	C	E	C	C	E	C	C
Approach Vol, veh/h		1083			951			917			597	
Approach Delay, s/veh		48.8			37.0			34.9			36.0	
Approach LOS		D			D			C			D	

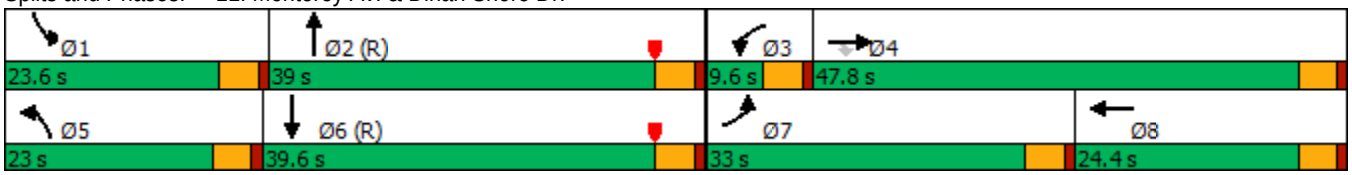
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	51.6	20.1	36.4	19.0	44.5	8.8	47.7
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	12.5	32.0	22.5	36.0	20.5	24.0	8.9	49.6
Max Q Clear Time (g_c+I1), s	7.8	14.9	15.3	29.2	14.3	13.5	5.3	17.6
Green Ext Time (p_c), s	0.1	3.4	0.3	3.2	0.2	2.0	0.0	4.4

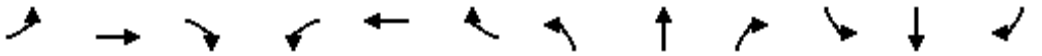
Intersection Summary	
HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	555	305	294	46	371	630	333	1052	31	338	795	350
Future Volume (vph)	555	305	294	46	371	630	333	1052	31	338	795	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	572	314	303	47	382	649	343	1085	32	348	820	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	572	314	303	47	382	649	343	1117	0	348	820	361
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	33.0	47.8	47.8	9.6	24.4		23.0	39.0		23.6	39.6	
Total Split (%)	27.5%	39.8%	39.8%	8.0%	20.3%		19.2%	32.5%		19.7%	33.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.





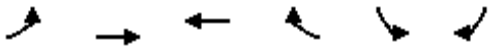
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	305	294	46	371	630	333	1052	31	338	795	350
Future Volume (veh/h)	555	305	294	46	371	630	333	1052	31	338	795	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	572	314	303	47	382	0	343	1085	32	348	820	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	651	1024	454	114	472		408	2084	61	414	2097	
Arrive On Green	0.19	0.29	0.29	0.03	0.13	0.00	0.12	0.41	0.41	0.12	0.41	0.00
Sat Flow, veh/h	3456	3554	1577	3456	3554	1585	3456	5096	150	3456	5106	1585
Grp Volume(v), veh/h	572	314	303	47	382	0	343	724	393	348	820	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1585	1728	1702	1843	1728	1702	1585
Q Serve(g_s), s	19.3	8.3	20.3	1.6	12.5	0.0	11.7	19.2	19.2	11.8	13.5	0.0
Cycle Q Clear(g_c), s	19.3	8.3	20.3	1.6	12.5	0.0	11.7	19.2	19.2	11.8	13.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	651	1024	454	114	472		408	1392	754	414	2097	
V/C Ratio(X)	0.88	0.31	0.67	0.41	0.81		0.84	0.52	0.52	0.84	0.39	
Avail Cap(c_a), veh/h	821	1282	569	147	589		533	1392	754	550	2097	
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	47.4	33.3	37.6	56.9	50.6	0.0	51.8	26.6	26.6	51.7	24.8	0.0
Incr Delay (d2), s/veh	9.0	0.2	2.1	2.4	6.8	0.0	9.1	1.4	2.6	8.6	0.5	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	8.9	3.5	7.8	0.7	5.9	0.0	5.4	7.5	8.4	5.4	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	33.5	39.7	59.3	57.3	0.0	60.9	28.0	29.2	60.3	25.4	0.0
LnGrp LOS	E	C	D	E	E		E	C	C	E	C	
Approach Vol, veh/h		1189			429	A		1460			1168	A
Approach Delay, s/veh		46.1			57.5			36.1			35.8	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	53.6	8.5	39.1	18.7	53.8	27.1	20.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.1	34.5	5.1	43.3	18.5	35.1	28.5	19.9
Max Q Clear Time (g_c+I1), s	13.8	21.2	3.6	22.3	13.7	15.5	21.3	14.5
Green Ext Time (p_c), s	0.6	5.3	0.0	2.8	0.5	4.8	1.3	1.0

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	81	47	75	80	57	132
Future Volume (vph)	81	47	75	80	57	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		254	1594		1667	
Travel Time (s)		5.8	36.2		37.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	51	82	87	62	143
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	139	169	0	205	0
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	4.1
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	139	169	205
Demand Flow Rate, veh/h	142	173	209
Vehicles Circulating, veh/h	63	90	84
Vehicles Exiting, veh/h	230	115	179
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.7	4.1	4.3
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	142	173	209
Cap Entry Lane, veh/h	1294	1259	1267
Entry HV Adj Factor	0.979	0.979	0.981
Flow Entry, veh/h	139	169	205
Cap Entry, veh/h	1266	1232	1242
V/C Ratio	0.110	0.137	0.165
Control Delay, s/veh	3.7	4.1	4.3
LOS	A	A	A
95th %tile Queue, veh	0	0	1

APPENDIX 6.1: EAPC (2027) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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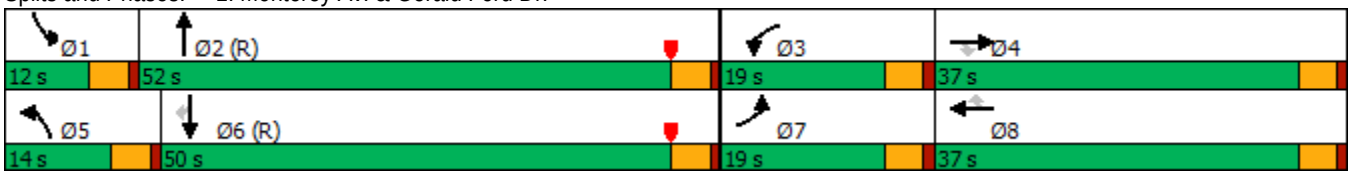
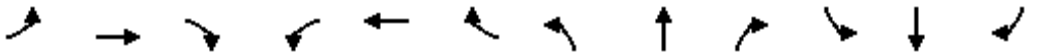
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	397	147	194	564	166	105	772	101	88	1186	167
Future Volume (vph)	193	397	147	194	564	166	105	772	101	88	1186	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	222	456	169	223	648	191	121	887	116	101	1363	192
Shared Lane Traffic (%)												
Lane Group Flow (vph)	222	456	169	223	648	191	121	1003	0	101	1363	192
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	19.0	37.0	37.0	19.0	37.0	37.0	14.0	52.0		12.0	50.0	50.0
Total Split (%)	15.8%	30.8%	30.8%	15.8%	30.8%	30.8%	11.7%	43.3%		10.0%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	397	147	194	564	166	105	772	101	88	1186	167
Future Volume (veh/h)	193	397	147	194	564	166	105	772	101	88	1186	167
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	456	169	223	648	191	121	887	116	101	1363	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	752	333	281	749	332	176	2345	305	153	2585	
Arrive On Green	0.08	0.21	0.21	0.16	0.42	0.42	0.05	0.51	0.51	0.04	0.51	0.00
Sat Flow, veh/h	3456	3554	1574	3456	3554	1574	3456	4570	595	3456	5106	1585
Grp Volume(v), veh/h	222	456	169	223	648	191	121	660	343	101	1363	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1574	1728	1777	1574	1728	1702	1761	1728	1702	1585
Q Serve(g_s), s	7.6	13.9	11.4	7.4	19.9	11.1	4.1	14.0	14.1	3.5	21.6	0.0
Cycle Q Clear(g_c), s	7.6	13.9	11.4	7.4	19.9	11.1	4.1	14.0	14.1	3.5	21.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	284	752	333	281	749	332	176	1746	904	153	2585	
V/C Ratio(X)	0.78	0.61	0.51	0.79	0.87	0.58	0.69	0.38	0.38	0.66	0.53	
Avail Cap(c_a), veh/h	418	962	426	418	962	426	274	1746	904	216	2585	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	42.8	41.8	49.3	33.2	30.6	56.0	17.6	17.7	56.5	19.9	0.0
Incr Delay (d2), s/veh	5.7	0.8	1.2	5.8	6.3	1.5	4.7	0.6	1.2	4.8	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	3.4	6.0	4.4	3.1	6.8	3.6	1.8	5.2	5.5	1.5	7.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	43.6	43.0	55.1	39.5	32.1	60.7	18.3	18.9	61.3	20.7	0.0
LnGrp LOS	E	D	D	E	D	C	E	B	B	E	C	
Approach Vol, veh/h		847			1062			1124			1464	A
Approach Delay, s/veh		47.7			41.4			23.0			23.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	66.1	14.2	29.9	10.6	65.3	14.4	29.8
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	7.5	47.5	14.5	32.5	9.5	45.5	14.5	32.5
Max Q Clear Time (g_c+I1), s	5.5	16.1	9.4	15.9	6.1	23.6	9.6	21.9
Green Ext Time (p_c), s	0.0	6.4	0.3	2.9	0.1	9.0	0.3	3.3

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

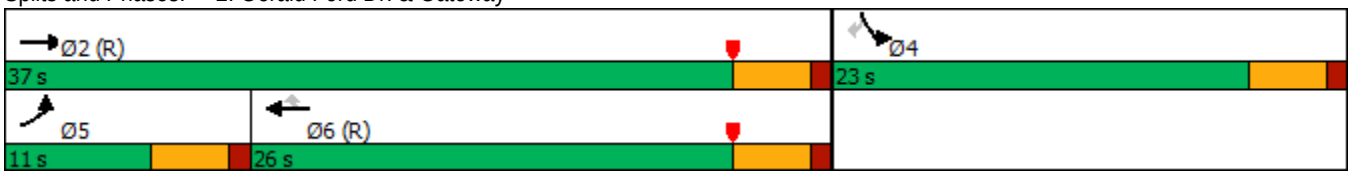
Notes

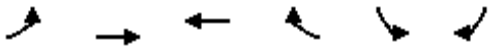
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	59	527	847	141	197	89
Future Volume (vph)	59	527	847	141	197	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	66	592	952	158	221	100
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	592	952	158	221	100
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	37.0	26.0	26.0	23.0	23.0
Total Split (%)	18.3%	61.7%	43.3%	43.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Gerald Ford Dr. & Gateway

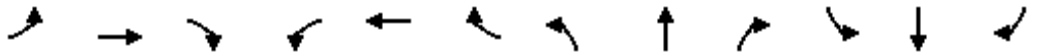




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	59	527	847	141	197	89
Future Volume (veh/h)	59	527	847	141	197	89
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	592	952	158	221	100
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	99	1925	2099	648	549	489
Arrive On Green	0.06	0.54	0.41	0.41	0.31	0.31
Sat Flow, veh/h	1781	3647	5274	1575	1781	1585
Grp Volume(v), veh/h	66	592	952	158	221	100
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1575	1781	1585
Q Serve(g_s), s	2.2	5.5	8.1	3.9	5.9	2.8
Cycle Q Clear(g_c), s	2.2	5.5	8.1	3.9	5.9	2.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	99	1925	2099	648	549	489
V/C Ratio(X)	0.67	0.31	0.45	0.24	0.40	0.20
Avail Cap(c_a), veh/h	193	1925	2099	648	549	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	7.6	12.8	11.6	16.4	15.3
Incr Delay (d2), s/veh	6.3	0.3	0.7	0.9	2.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.5	2.5	1.2	2.5	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.0	7.9	13.5	12.5	18.6	16.3
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		658	1110		321	
Approach Delay, s/veh		10.5	13.4		17.9	
Approach LOS		B	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		37.0		23.0	7.8	29.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		32.5		18.5	6.5	21.5
Max Q Clear Time (g_c+I1), s		7.5		7.9	4.2	10.1
Green Ext Time (p_c), s		3.6		0.7	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	613	50	33	814	24	139	2	92	50	1	44
Future Volume (vph)	18	613	50	33	814	24	139	2	92	50	1	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	20	689	56	37	915	27	156	2	103	56	1	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	745	0	37	915	27	0	158	103	0	57	49
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	19

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	613	50	33	814	24	139	2	92	50	1	44
Future Vol, veh/h	18	613	50	33	814	24	139	2	92	50	1	44
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	150	-	110	-	-	150	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	689	56	37	915	27	156	2	103	56	1	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	947	0	0	745	0	0	1203	1778	378	1385	1779	468
Stage 1	-	-	-	-	-	-	757	757	-	994	994	-
Stage 2	-	-	-	-	-	-	446	1021	-	391	785	-
Critical Hdwy	5.34	-	-	4.14	-	-	6.99	6.54	6.94	6.99	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.54	5.54	-
Follow-up Hdwy	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92
Pot Cap-1 Maneuver	415	-	-	859	-	-	165	82	620	124	81	463
Stage 1	-	-	-	-	-	-	356	414	-	206	321	-
Stage 2	-	-	-	-	-	-	530	312	-	585	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	413	-	-	859	-	-	~ 135	74	617	93	73	459
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 135	74	-	93	73	-
Stage 1	-	-	-	-	-	-	339	394	-	195	306	-
Stage 2	-	-	-	-	-	-	449	297	-	459	383	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.4	127.6	55.9
HCM LOS			F	F

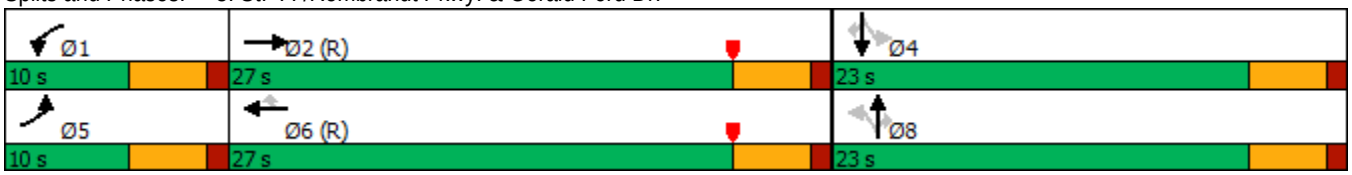
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	133	617	413	-	-	859	-	-	93	459
HCM Lane V/C Ratio	1.191	0.168	0.049	-	-	0.043	-	-	0.616	0.108
HCM Control Delay (s)	203	12	14.2	-	-	9.4	-	-	92.2	13.8
HCM Lane LOS	F	B	B	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	9.5	0.6	0.2	-	-	0.1	-	-	2.9	0.4

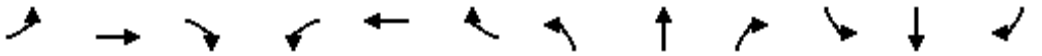
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	613	50	33	814	24	139	2	92	50	1	44
Future Volume (vph)	18	613	50	33	814	24	139	2	92	50	1	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	20	689	56	37	915	27	156	2	103	56	1	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	745	0	37	915	27	0	158	103	0	57	49
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	27.0		10.0	27.0	27.0	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (%)	16.7%	45.0%		16.7%	45.0%	45.0%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: St. "A"/Rembrandt Pkwy. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	613	50	33	814	24	139	2	92	50	1	44
Future Volume (veh/h)	18	613	50	33	814	24	139	2	92	50	1	44
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	689	56	37	915	27	156	2	103	56	1	49
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	2	2	2	2	2	2
Cap, veh/h	42	1425	116	68	2262	698	119	1	489	119	1	486
Arrive On Green	0.02	0.29	0.29	0.04	0.44	0.44	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3327	270	1781	5106	1576	0	3	1585	0	4	1577
Grp Volume(v), veh/h	20	368	377	37	915	27	158	0	103	57	0	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1820	1781	1702	1576	3	0	1585	4	0	1577
Q Serve(g_s), s	0.7	10.3	10.3	1.2	7.3	0.6	0.0	0.0	2.9	0.0	0.0	1.3
Cycle Q Clear(g_c), s	0.7	10.3	10.3	1.2	7.3	0.6	18.5	0.0	2.9	18.5	0.0	1.3
Prop In Lane	1.00		0.15	1.00		1.00	0.99		1.00	0.98		1.00
Lane Grp Cap(c), veh/h	42	761	779	68	2262	698	120	0	489	120	0	486
V/C Ratio(X)	0.48	0.48	0.48	0.54	0.40	0.04	1.32	0.00	0.21	0.47	0.00	0.10
Avail Cap(c_a), veh/h	163	761	779	163	2262	698	120	0	489	120	0	486
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.2	15.9	15.9	28.3	11.3	9.5	29.9	0.0	15.3	29.6	0.0	14.8
Incr Delay (d2), s/veh	7.7	2.1	2.0	6.5	0.5	0.1	189.2	0.0	1.0	12.9	0.0	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	0.3	4.0	4.1	0.6	2.2	0.2	8.0	0.0	1.1	1.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	18.0	17.9	34.8	11.9	9.6	219.1	0.0	16.3	42.5	0.0	15.2
LnGrp LOS	D	B	B	C	B	A	F	A	B	D	A	B
Approach Vol, veh/h		765			979			261			106	
Approach Delay, s/veh		18.5			12.7			139.1			29.9	
Approach LOS		B			B			F			C	

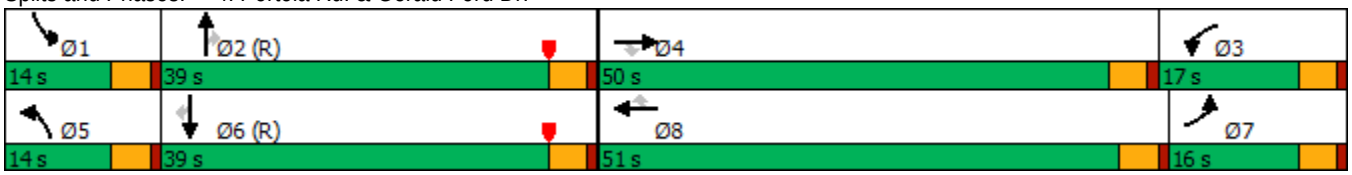
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	30.2		23.0	5.9	31.1		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	22.5		18.5	5.5	22.5		18.5				
Max Q Clear Time (g_c+I1), s	3.2	12.3		20.5	2.7	9.3		20.5				
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	4.7		0.0				

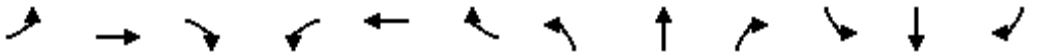
Intersection Summary												
HCM 6th Ctrl Delay			31.3									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	555	211	97	686	184	182	394	96	87	344	2
Future Volume (vph)	13	555	211	97	686	184	182	394	96	87	344	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	15	653	248	114	807	216	214	464	113	102	405	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	653	248	114	807	216	214	464	113	102	405	2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	16.0	50.0	50.0	17.0	51.0	51.0	14.0	39.0	39.0	14.0	39.0	39.0
Total Split (%)	13.3%	41.7%	41.7%	14.2%	42.5%	42.5%	11.7%	32.5%	32.5%	11.7%	32.5%	32.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	555	211	97	686	184	182	394	96	87	344	2
Future Volume (veh/h)	13	555	211	97	686	184	182	394	96	87	344	2
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	653	248	114	807	0	214	464	113	102	405	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	819	363	171	1100		265	2682	830	155	2520	
Arrive On Green	0.06	0.23	0.23	0.02	0.07	0.00	0.15	1.00	1.00	0.04	0.49	0.00
Sat Flow, veh/h	1781	3554	1575	3456	5106	1585	3456	5106	1581	3456	5106	1585
Grp Volume(v), veh/h	15	653	248	114	807	0	214	464	113	102	405	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1575	1728	1702	1585	1728	1702	1581	1728	1702	1585
Q Serve(g_s), s	1.0	20.8	13.9	3.9	18.6	0.0	7.2	0.0	0.0	3.5	5.2	0.0
Cycle Q Clear(g_c), s	1.0	20.8	13.9	3.9	18.6	0.0	7.2	0.0	0.0	3.5	5.2	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	115	819	363	171	1100		265	2682	830	155	2520	
V/C Ratio(X)	0.13	0.80	0.68	0.67	0.73		0.81	0.17	0.14	0.66	0.16	
Avail Cap(c_a), veh/h	171	1347	597	360	1979		274	2682	830	274	2520	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.00	0.99	0.99	0.99	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.0	43.5	27.2	58.0	52.4	0.0	50.0	0.0	0.0	56.4	16.7	0.0
Incr Delay (d2), s/veh	0.5	1.8	2.3	3.8	0.8	0.0	15.8	0.1	0.3	4.7	0.1	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	0.4	9.0	5.2	1.8	8.5	0.0	3.4	0.0	0.1	1.6	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	45.4	29.5	61.8	53.2	0.0	65.7	0.1	0.3	61.1	16.9	0.0
LnGrp LOS	D	D	C	E	D		E	A	A	E	B	
Approach Vol, veh/h		916			921	A		791			507	A
Approach Delay, s/veh		41.2			54.3			17.9			25.8	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	67.5	10.4	32.1	13.7	63.7	12.2	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	9.5	34.5	12.5	45.5	9.5	34.5	11.5	46.5
Max Q Clear Time (g_c+I1), s	5.5	2.0	5.9	22.8	9.2	7.2	3.0	20.6
Green Ext Time (p_c), s	0.1	3.2	0.1	4.8	0.0	2.4	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

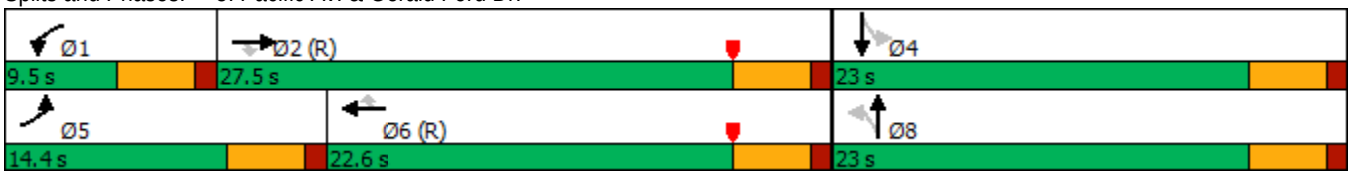
Notes

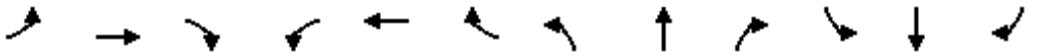
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	590	41	19	799	142	31	69	25	172	73	136
Future Volume (vph)	107	590	41	19	799	142	31	69	25	172	73	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	129	711	49	23	963	171	37	83	30	207	88	164
Shared Lane Traffic (%)												
Lane Group Flow (vph)	129	711	49	23	963	171	37	113	0	207	252	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	14.4	27.5	27.5	9.5	22.6	22.6	23.0	23.0		23.0	23.0	
Total Split (%)	24.0%	45.8%	45.8%	15.8%	37.7%	37.7%	38.3%	38.3%		38.3%	38.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	590	41	19	799	142	31	69	25	172	73	136
Future Volume (veh/h)	107	590	41	19	799	142	31	69	25	172	73	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	711	49	23	963	171	37	83	30	207	88	164
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	2247	695	47	1906	589	376	799	275	482	548	486
Arrive On Green	0.09	0.44	0.44	0.03	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	5106	1580	1781	5106	1579	1124	2590	892	1275	1777	1577
Grp Volume(v), veh/h	129	711	49	23	963	171	37	56	57	207	88	164
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1579	1124	1777	1705	1275	1777	1577
Q Serve(g_s), s	4.2	5.4	1.1	0.8	8.7	4.6	1.6	1.3	1.4	8.3	2.2	4.8
Cycle Q Clear(g_c), s	4.2	5.4	1.1	0.8	8.7	4.6	6.4	1.3	1.4	9.8	2.2	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	166	2247	695	47	1906	589	376	548	526	482	548	486
V/C Ratio(X)	0.78	0.32	0.07	0.49	0.51	0.29	0.10	0.10	0.11	0.43	0.16	0.34
Avail Cap(c_a), veh/h	294	2247	695	148	1906	589	376	548	526	482	548	486
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)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	10.9	9.7	28.8	14.5	13.2	18.5	14.8	14.9	18.3	15.1	16.0
Incr Delay (d2), s/veh	5.7	0.3	0.1	7.6	1.0	1.2	0.5	0.4	0.4	2.8	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.6	0.3	0.4	3.0	1.6	0.4	0.6	0.6	2.6	0.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	11.2	9.8	36.4	15.5	14.5	19.0	15.2	15.3	21.1	15.7	17.9
LnGrp LOS	C	B	A	D	B	B	B	B	B	C	B	B
Approach Vol, veh/h		889			1157			150			459	
Approach Delay, s/veh		14.2			15.7			16.2			18.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	30.9		23.0	10.1	26.9		23.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.0		18.5	9.9	18.1		18.5				
Max Q Clear Time (g_c+I1), s	2.8	7.4		11.8	6.2	10.7		8.4				
Green Ext Time (p_c), s	0.0	4.0		1.3	0.1	3.9		0.5				

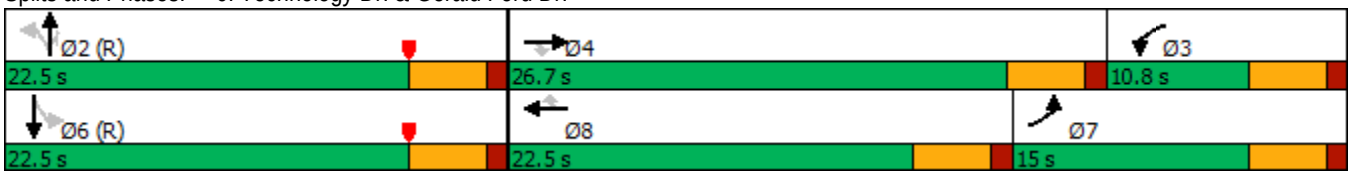
Intersection Summary			
HCM 6th Ctrl Delay		15.8	
HCM 6th LOS		B	

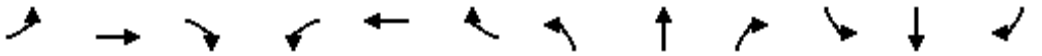
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	535	123	49	780	64	80	41	113	80	27	101
Future Volume (vph)	129	535	123	49	780	64	80	41	113	80	27	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	155	645	148	59	940	77	96	49	136	96	33	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	155	645	148	59	940	77	96	49	136	96	155	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	15.0	26.7	26.7	10.8	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (%)	25.0%	44.5%	44.5%	18.0%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	535	123	49	780	64	80	41	113	80	27	101
Future Volume (veh/h)	129	535	123	49	780	64	80	41	113	80	27	101
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	645	148	59	940	77	96	49	136	96	33	122
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1115	342	276	1339	412	537	752	635	581	140	517
Arrive On Green	0.11	0.22	0.22	0.05	0.09	0.09	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	5106	1567	1781	5106	1570	1229	1870	1579	1195	348	1286
Grp Volume(v), veh/h	155	645	148	59	940	77	96	49	136	96	0	155
Grp Sat Flow(s),veh/h/ln	1781	1702	1567	1781	1702	1570	1229	1870	1579	1195	0	1633
Q Serve(g_s), s	5.1	6.8	4.9	1.9	10.7	2.7	3.4	1.0	3.4	3.2	0.0	3.8
Cycle Q Clear(g_c), s	5.1	6.8	4.9	1.9	10.7	2.7	7.1	1.0	3.4	4.2	0.0	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	198	1115	342	276	1339	412	537	752	635	581	0	656
V/C Ratio(X)	0.78	0.58	0.43	0.21	0.70	0.19	0.18	0.07	0.21	0.17	0.00	0.24
Avail Cap(c_a), veh/h	312	1889	580	276	1532	471	537	752	635	581	0	656
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.73	0.73	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	21.0	20.2	25.0	25.1	21.5	14.2	11.0	11.7	12.3	0.0	11.9
Incr Delay (d2), s/veh	6.7	0.5	0.9	0.3	0.9	0.2	0.7	0.2	0.8	0.6	0.0	0.8
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	2.3	2.4	1.7	0.8	4.6	0.9	0.9	0.4	1.1	0.8	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	21.5	21.1	25.2	26.0	21.6	14.9	11.2	12.5	12.9	0.0	12.7
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	A	B
Approach Vol, veh/h		948			1076			281			251	
Approach Delay, s/veh		23.2			25.7			13.1			12.8	
Approach LOS		C			C			B			B	

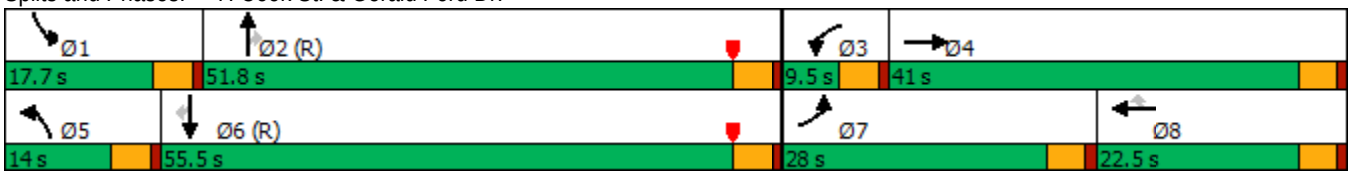
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		28.6	13.8	17.6		28.6	11.2	20.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	6.3	22.2		18.0	10.5	18.0				
Max Q Clear Time (g_c+I1), s		9.1	3.9	8.8		6.2	7.1	12.7				
Green Ext Time (p_c), s		0.7	0.0	3.9		0.9	0.1	2.8				

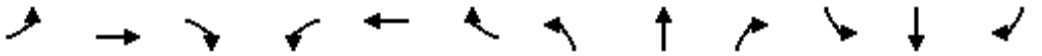
Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	418	196	142	32	292	140	146	609	31	188	1500	465
Future Volume (vph)	418	196	142	32	292	140	146	609	31	188	1500	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	498	233	169	38	348	167	174	725	37	224	1786	554
Shared Lane Traffic (%)												
Lane Group Flow (vph)	498	233	169	38	348	167	174	725	37	224	1786	554
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	28.0	41.0		9.5	22.5	22.5	14.0	51.8	51.8	17.7	55.5	55.5
Total Split (%)	23.3%	34.2%		7.9%	18.8%	18.8%	11.7%	43.2%	43.2%	14.8%	46.3%	46.3%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	418	196	142	32	292	140	146	609	31	188	1500	465
Future Volume (veh/h)	418	196	142	32	292	140	146	609	31	188	1500	465
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	498	233	0	38	348	167	174	725	37	224	1786	554
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	561	936		103	466	206	230	2423	750	284	2502	774
Arrive On Green	0.27	0.44	0.00	0.03	0.13	0.13	0.07	0.47	0.47	0.08	0.49	0.49
Sat Flow, veh/h	3456	3554	1585	3456	3554	1567	3456	5106	1580	3456	5106	1580
Grp Volume(v), veh/h	498	233	0	38	348	167	174	725	37	224	1786	554
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1567	1728	1702	1580	1728	1702	1580
Q Serve(g_s), s	16.6	4.9	0.0	1.3	11.3	12.4	5.9	10.4	1.5	7.6	32.9	33.0
Cycle Q Clear(g_c), s	16.6	4.9	0.0	1.3	11.3	12.4	5.9	10.4	1.5	7.6	32.9	33.0
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	561	936		103	466	206	230	2423	750	284	2502	774
V/C Ratio(X)	0.89	0.25		0.37	0.75	0.81	0.76	0.30	0.05	0.79	0.71	0.72
Avail Cap(c_a), veh/h	677	1081		144	533	235	274	2423	750	380	2502	774
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	26.1	0.0	57.1	50.2	50.7	55.0	19.3	17.0	54.1	24.0	24.0
Incr Delay (d2), s/veh	11.6	0.1	0.0	2.2	5.0	17.2	9.6	0.3	0.1	7.8	1.8	5.6
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	7.0	2.0	0.0	0.6	5.2	5.7	2.8	3.9	0.5	3.5	12.3	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	26.3	0.0	59.3	55.2	67.9	64.6	19.6	17.1	61.9	25.8	29.6
LnGrp LOS	D	C		E	E	E	E	B	B	E	C	C
Approach Vol, veh/h		731	A		553			936			2564	
Approach Delay, s/veh		45.3			59.3			27.9			29.8	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	61.4	8.1	36.1	12.5	63.3	24.0	20.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.2	47.3	5.0	36.5	9.5	51.0	23.5	18.0
Max Q Clear Time (g_c+I1), s	9.6	12.4	3.3	6.9	7.9	35.0	18.6	14.4
Green Ext Time (p_c), s	0.2	4.8	0.0	1.4	0.1	11.6	0.9	0.9

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

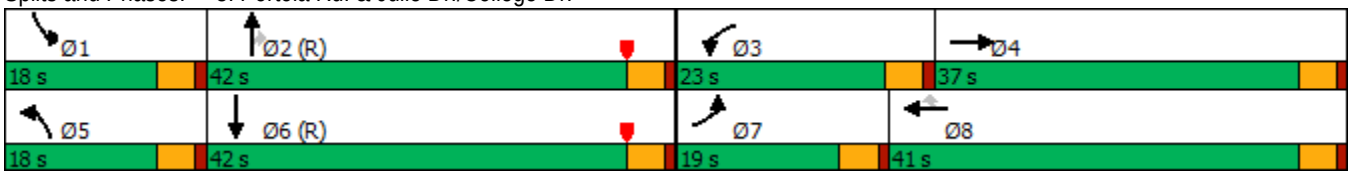
Notes

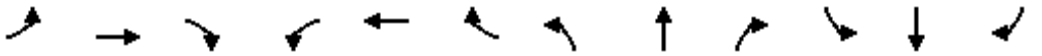
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	66	115	74	23	60	41	611	42	40	572	39
Future Volume (vph)	50	66	115	74	23	60	41	611	42	40	572	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		60	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1594			463			3682			1684	
Travel Time (s)		36.2			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	56	74	129	83	26	67	46	687	47	45	643	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	203	0	83	26	67	46	687	47	45	687	0
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	19.0	37.0		23.0	41.0	41.0	18.0	42.0	42.0	18.0	42.0	
Total Split (%)	15.8%	30.8%		19.2%	34.2%	34.2%	15.0%	35.0%	35.0%	15.0%	35.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	66	115	74	23	60	41	611	42	40	572	39
Future Volume (veh/h)	50	66	115	74	23	60	41	611	42	40	572	39
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	74	129	83	26	67	46	687	47	45	643	44
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	2	2	2	2	2	2
Cap, veh/h	73	88	153	106	306	257	59	3130	968	58	2988	203
Arrive On Green	0.04	0.14	0.14	0.06	0.16	0.16	0.03	0.61	0.61	0.06	1.00	1.00
Sat Flow, veh/h	1781	608	1059	1781	1870	1571	1781	5106	1579	1781	4881	332
Grp Volume(v), veh/h	56	0	203	83	26	67	46	687	47	45	447	240
Grp Sat Flow(s),veh/h/ln	1781	0	1667	1781	1870	1571	1781	1702	1579	1781	1702	1809
Q Serve(g_s), s	3.7	0.0	14.2	5.5	1.4	4.5	3.1	7.2	1.4	3.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	14.2	5.5	1.4	4.5	3.1	7.2	1.4	3.0	0.0	0.0
Prop In Lane	1.00		0.64	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	73	0	241	106	306	257	59	3130	968	58	2084	1107
V/C Ratio(X)	0.77	0.00	0.84	0.78	0.08	0.26	0.77	0.22	0.05	0.78	0.21	0.22
Avail Cap(c_a), veh/h	215	0	451	275	569	478	200	3130	968	200	2084	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.95	0.95	0.95
Uniform Delay (d), s/veh	57.0	0.0	50.0	55.7	42.6	43.8	57.5	10.4	9.3	55.7	0.0	0.0
Incr Delay (d2), s/veh	15.6	0.0	7.7	11.7	0.1	0.5	17.7	0.2	0.1	18.8	0.2	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	2.0	0.0	6.4	2.8	0.7	1.8	1.6	2.4	0.5	1.6	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	0.0	57.6	67.4	42.7	44.4	75.2	10.5	9.3	74.4	0.2	0.4
LnGrp LOS	E	A	E	E	D	D	E	B	A	E	A	A
Approach Vol, veh/h		259			176			780			732	
Approach Delay, s/veh		60.9			55.0			14.3			4.9	
Approach LOS		E			D			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	78.1	11.7	21.9	8.5	78.0	9.4	24.1
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	13.5	37.5	18.5	32.5	13.5	37.5	14.5	36.5
Max Q Clear Time (g_c+I1), s	5.0	9.2	7.5	16.2	5.1	2.0	5.7	6.5
Green Ext Time (p_c), s	0.0	4.5	0.1	1.0	0.0	4.1	0.1	0.3

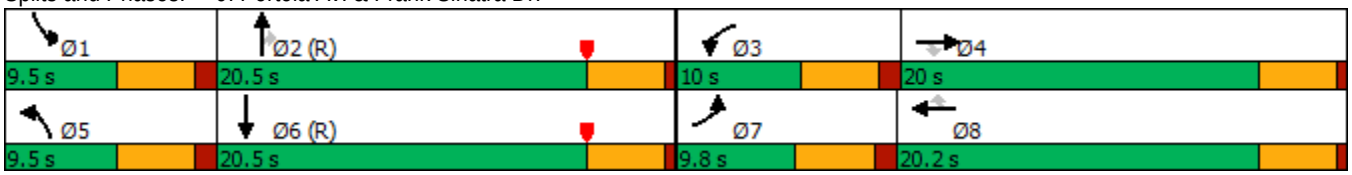
Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

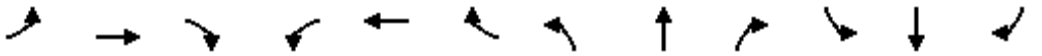
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	331	138	155	672	26	131	618	72	54	621	86
Future Volume (vph)	80	331	138	155	672	26	131	618	72	54	621	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	91	376	157	176	764	30	149	702	82	61	706	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	376	157	176	764	30	149	702	82	61	804	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.8	20.0	20.0	10.0	20.2	20.2	9.5	20.5	20.5	9.5	20.5	
Total Split (%)	16.3%	33.3%	33.3%	16.7%	33.7%	33.7%	15.8%	34.2%	34.2%	15.8%	34.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	331	138	155	672	26	131	618	72	54	621	86
Future Volume (veh/h)	80	331	138	155	672	26	131	618	72	54	621	86
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	376	157	176	764	30	149	702	82	61	706	98
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	810	359	163	903	400	148	1757	543	95	1423	196
Arrive On Green	0.07	0.23	0.23	0.09	0.25	0.25	0.08	0.34	0.34	0.05	0.31	0.31
Sat Flow, veh/h	1781	3554	1575	1781	3554	1576	1781	5106	1578	1781	4535	624
Grp Volume(v), veh/h	91	376	157	176	764	30	149	702	82	61	528	276
Grp Sat Flow(s),veh/h/ln	1781	1777	1575	1781	1777	1576	1781	1702	1578	1781	1702	1755
Q Serve(g_s), s	3.0	5.5	5.1	5.5	12.3	0.9	5.0	6.3	2.2	2.0	7.6	7.7
Cycle Q Clear(g_c), s	3.0	5.5	5.1	5.5	12.3	0.9	5.0	6.3	2.2	2.0	7.6	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	116	810	359	163	903	400	148	1757	543	95	1068	551
V/C Ratio(X)	0.78	0.46	0.44	1.08	0.85	0.07	1.00	0.40	0.15	0.64	0.49	0.50
Avail Cap(c_a), veh/h	157	948	420	163	959	425	148	1757	543	148	1068	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	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	27.6	20.0	19.9	27.3	21.3	17.0	27.5	15.0	13.6	27.8	16.7	16.8
Incr Delay (d2), s/veh	16.1	0.4	0.8	92.7	6.8	0.1	74.9	0.7	0.6	7.0	1.6	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	1.7	2.0	1.7	6.2	5.1	0.3	4.9	2.0	0.7	0.9	2.6	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	20.4	20.7	120.0	28.0	17.1	102.4	15.6	14.2	34.8	18.3	19.9
LnGrp LOS	D	C	C	F	C	B	F	B	B	C	B	B
Approach Vol, veh/h		624			970			933			865	
Approach Delay, s/veh		23.9			44.4			29.4			20.0	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	24.6	10.0	17.7	9.5	22.8	8.4	19.2
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.0	16.5	5.5	16.0	5.0	16.5	5.3	16.2
Max Q Clear Time (g_c+I1), s	4.0	8.3	7.5	7.5	7.0	9.7	5.0	14.3
Green Ext Time (p_c), s	0.0	2.8	0.0	1.7	0.0	2.5	0.0	0.9

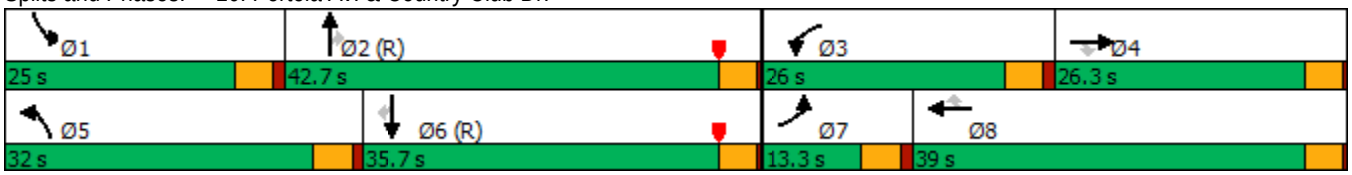
Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

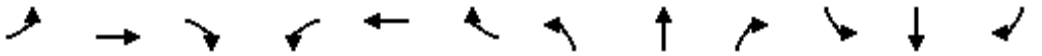
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	430	189	204	776	142	272	580	208	146	641	86
Future Volume (vph)	71	430	189	204	776	142	272	580	208	146	641	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	84	506	222	240	913	167	320	682	245	172	754	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	506	222	240	913	167	320	682	245	172	754	101
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	13.3	26.3	26.3	26.0	39.0	39.0	32.0	42.7	42.7	25.0	35.7	35.7
Total Split (%)	11.1%	21.9%	21.9%	21.7%	32.5%	32.5%	26.7%	35.6%	35.6%	20.8%	29.8%	29.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	430	189	204	776	142	272	580	208	146	641	86
Future Volume (veh/h)	71	430	189	204	776	142	272	580	208	146	641	86
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	506	222	240	913	167	320	682	245	172	754	101
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	672	298	268	997	442	349	1441	640	201	1146	509
Arrive On Green	0.06	0.19	0.19	0.15	0.28	0.28	0.20	0.41	0.41	0.11	0.32	0.32
Sat Flow, veh/h	1781	3554	1572	1781	3554	1577	1781	3554	1579	1781	3554	1578
Grp Volume(v), veh/h	84	506	222	240	913	167	320	682	245	172	754	101
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1777	1577	1781	1777	1579	1781	1777	1578
Q Serve(g_s), s	5.6	16.2	16.0	15.9	29.9	10.2	21.1	16.9	13.1	11.4	21.9	5.6
Cycle Q Clear(g_c), s	5.6	16.2	16.0	15.9	29.9	10.2	21.1	16.9	13.1	11.4	21.9	5.6
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	106	672	298	268	997	442	349	1441	640	201	1146	509
V/C Ratio(X)	0.79	0.75	0.75	0.89	0.92	0.38	0.92	0.47	0.38	0.85	0.66	0.20
Avail Cap(c_a), veh/h	131	672	298	319	1036	460	408	1441	640	304	1146	509
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	55.7	46.0	45.9	50.0	41.8	34.7	47.3	26.2	25.1	52.3	35.0	29.4
Incr Delay (d2), s/veh	22.9	4.8	9.9	23.2	12.1	0.5	23.2	1.1	1.7	13.8	3.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	7.3	6.8	8.5	14.1	3.8	11.1	6.9	5.0	5.6	9.4	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.6	50.8	55.8	73.2	54.0	35.3	70.5	27.4	26.8	66.1	37.9	30.3
LnGrp LOS	E	D	E	E	D	D	E	C	C	E	D	C
Approach Vol, veh/h		812			1320			1247			1027	
Approach Delay, s/veh		55.0			55.1			38.3			41.9	
Approach LOS		E			E			D			D	

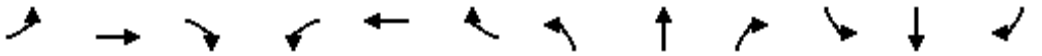
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	52.7	22.6	26.7	28.0	42.7	11.6	37.6
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	20.5	38.7	21.5	22.3	27.5	31.7	8.8	35.0
Max Q Clear Time (g_c+I1), s	13.4	18.9	17.9	18.2	23.1	23.9	7.6	31.9
Green Ext Time (p_c), s	0.2	4.7	0.2	1.5	0.4	2.9	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	298	197	97	291	425	155	717	68	542	1513	348
Future Volume (vph)	279	298	197	97	291	425	155	717	68	542	1513	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	310	331	219	108	323	472	172	797	76	602	1681	387
Shared Lane Traffic (%)												
Lane Group Flow (vph)	310	331	219	108	323	472	172	873	0	602	1681	387
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.0	32.0	32.0	13.0	23.0		16.0	40.0		35.0	59.0	
Total Split (%)	18.3%	26.7%	26.7%	10.8%	19.2%		13.3%	33.3%		29.2%	49.2%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.



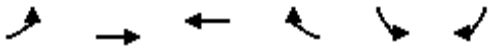
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	298	197	97	291	425	155	717	68	542	1513	348
Future Volume (veh/h)	279	298	197	97	291	425	155	717	68	542	1513	348
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	310	331	219	108	323	0	172	797	76	602	1681	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	639	283	161	420		230	2018	191	684	2843	
Arrive On Green	0.11	0.18	0.18	0.05	0.12	0.00	0.07	0.43	0.43	0.20	0.56	0.00
Sat Flow, veh/h	3456	3554	1572	3456	3554	1585	3456	4742	450	3456	5106	1585
Grp Volume(v), veh/h	310	331	219	108	323	0	172	571	302	602	1681	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1572	1728	1777	1585	1728	1702	1788	1728	1702	1585
Q Serve(g_s), s	10.5	10.1	15.9	3.7	10.6	0.0	5.9	13.9	14.0	20.3	26.1	0.0
Cycle Q Clear(g_c), s	10.5	10.1	15.9	3.7	10.6	0.0	5.9	13.9	14.0	20.3	26.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	375	639	283	161	420		230	1449	761	684	2843	
V/C Ratio(X)	0.83	0.52	0.77	0.67	0.77		0.75	0.39	0.40	0.88	0.59	
Avail Cap(c_a), veh/h	504	814	360	245	548		331	1449	761	878	2843	
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	52.4	44.5	46.9	56.3	51.3	0.0	55.0	23.8	23.8	46.7	17.6	0.0
Incr Delay (d2), s/veh	8.2	0.7	7.8	4.7	4.9	0.0	5.4	0.8	1.5	8.5	0.9	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	4.9	4.4	6.7	1.7	4.9	0.0	2.6	5.4	5.8	9.1	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	45.1	54.7	61.0	56.2	0.0	60.4	24.6	25.4	55.2	18.5	0.0
LnGrp LOS	E	D	D	E	E		E	C	C	E	B	
Approach Vol, veh/h		860			431	A		1045			2283	A
Approach Delay, s/veh		53.2			57.4			30.7			28.2	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.2	55.6	10.1	26.1	12.5	71.3	17.5	18.7
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	30.5	35.5	8.5	27.5	11.5	54.5	17.5	18.5
Max Q Clear Time (g_c+I1), s	22.3	16.0	5.7	17.9	7.9	28.1	12.5	12.6
Green Ext Time (p_c), s	1.4	4.8	0.1	1.9	0.2	12.8	0.5	0.9

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	123	70	25	47	79	44
Future Volume (vph)	123	70	25	47	79	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		254	1594		1667	
Travel Time (s)		5.8	36.2		37.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	76	27	51	86	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	210	78	0	134	0
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	210	78	134
Demand Flow Rate, veh/h	215	80	137
Vehicles Circulating, veh/h	88	137	28
Vehicles Exiting, veh/h	77	166	189
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.4	3.6	3.6
Approach LOS	A	A	A

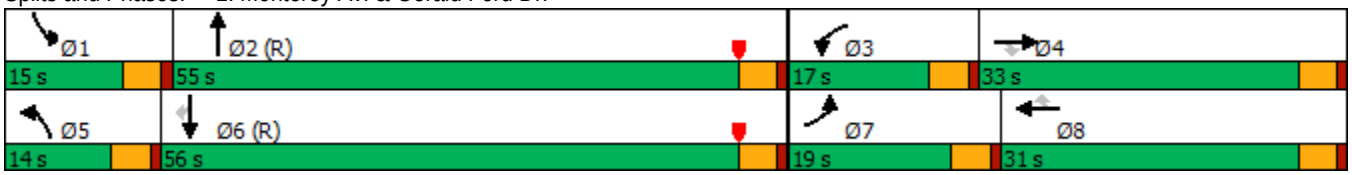
Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	215	80	137
Cap Entry Lane, veh/h	1261	1200	1341
Entry HV Adj Factor	0.979	0.981	0.978
Flow Entry, veh/h	210	78	134
Cap Entry, veh/h	1235	1177	1312
V/C Ratio	0.170	0.067	0.102
Control Delay, s/veh	4.4	3.6	3.6
LOS	A	A	A
95th %tile Queue, veh	1	0	0

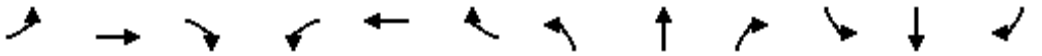
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	557	97	220	548	183	128	1379	226	177	1167	258
Future Volume (vph)	261	557	97	220	548	183	128	1379	226	177	1167	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		165	190		210	200		0	200		315
Storage Lanes	2		1	2		0	2		0	2		1
Taper Length (ft)	90			140			120			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		511			1502			732			1716	
Travel Time (s)		7.0			20.5			9.1			21.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	275	586	102	232	577	193	135	1452	238	186	1228	272
Shared Lane Traffic (%)												
Lane Group Flow (vph)	275	586	102	232	577	193	135	1690	0	186	1228	272
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phase	7	4	4	3	8	8	5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5		9.5	22.5	22.5
Total Split (s)	19.0	33.0	33.0	17.0	31.0	31.0	14.0	55.0		15.0	56.0	56.0
Total Split (%)	15.8%	27.5%	27.5%	14.2%	25.8%	25.8%	11.7%	45.8%		12.5%	46.7%	46.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	C-Max

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: Monterey Av. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	261	557	97	220	548	183	128	1379	226	177	1167	258
Future Volume (veh/h)	261	557	97	220	548	183	128	1379	226	177	1167	258
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	275	586	102	232	577	193	135	1452	238	186	1228	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	726	322	292	682	302	191	2169	355	243	2584	
Arrive On Green	0.10	0.20	0.20	0.06	0.13	0.13	0.06	0.49	0.49	0.07	0.51	0.00
Sat Flow, veh/h	3456	3554	1573	3456	3554	1573	3456	4418	723	3456	5106	1585
Grp Volume(v), veh/h	275	586	102	232	577	193	135	1118	572	186	1228	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1728	1777	1573	1728	1702	1738	1728	1702	1585
Q Serve(g_s), s	9.4	18.9	6.6	8.0	19.1	14.0	4.6	29.9	30.0	6.3	18.8	0.0
Cycle Q Clear(g_c), s	9.4	18.9	6.6	8.0	19.1	14.0	4.6	29.9	30.0	6.3	18.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	335	726	322	292	682	302	191	1671	853	243	2584	
V/C Ratio(X)	0.82	0.81	0.32	0.79	0.85	0.64	0.71	0.67	0.67	0.77	0.48	
Avail Cap(c_a), veh/h	418	844	374	360	785	347	274	1671	853	302	2584	
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.2	45.5	40.6	55.6	50.6	48.4	55.7	23.2	23.2	54.8	19.3	0.0
Incr Delay (d2), s/veh	10.1	5.1	0.6	8.6	6.9	2.8	4.8	2.1	4.2	8.8	0.6	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	4.4	8.5	2.5	3.8	9.2	5.8	2.1	11.3	12.0	2.9	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	50.6	41.2	64.2	57.5	51.2	60.5	25.3	27.4	63.6	19.9	0.0
LnGrp LOS	E	D	D	E	E	D	E	C	C	E	B	
Approach Vol, veh/h		963			1002			1825			1414	A
Approach Delay, s/veh		53.2			57.8			28.6			25.7	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	63.4	14.6	29.0	11.1	65.2	16.1	27.5
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	50.5	12.5	28.5	9.5	51.5	14.5	26.5
Max Q Clear Time (g_c+I1), s	8.3	32.0	10.0	20.9	6.6	20.8	11.4	21.1
Green Ext Time (p_c), s	0.1	10.2	0.2	2.3	0.1	8.9	0.3	2.0

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

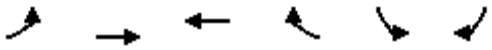
Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	122	838	813	164	185	174
Future Volume (vph)	122	838	813	164	185	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195			125	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	120				90	
Right Turn on Red				Yes		Yes
Link Speed (mph)		50	50		30	
Link Distance (ft)		1502	2201		993	
Travel Time (s)		20.5	30.0		22.6	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	134	921	893	180	203	191
Shared Lane Traffic (%)						
Lane Group Flow (vph)	134	921	893	180	203	191
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	14.6	37.5	22.9	22.9	22.5	22.5
Total Split (%)	24.3%	62.5%	38.2%	38.2%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	C-Max	C-Max	C-Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

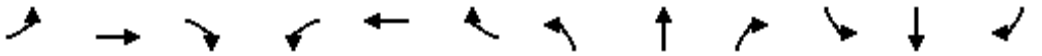
Splits and Phases: 2: Gerald Ford Dr. & Gateway



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	838	813	164	185	174
Future Volume (veh/h)	122	838	813	164	185	174
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	921	893	180	203	191
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	172	1955	1931	596	534	476
Arrive On Green	0.10	0.55	0.38	0.38	0.30	0.30
Sat Flow, veh/h	1781	3647	5274	1575	1781	1585
Grp Volume(v), veh/h	134	921	893	180	203	191
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1575	1781	1585
Q Serve(g_s), s	4.4	9.4	7.9	4.8	5.4	5.8
Cycle Q Clear(g_c), s	4.4	9.4	7.9	4.8	5.4	5.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	172	1955	1931	596	534	476
V/C Ratio(X)	0.78	0.47	0.46	0.30	0.38	0.40
Avail Cap(c_a), veh/h	300	1955	1931	596	534	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	8.2	14.1	13.1	16.6	16.7
Incr Delay (d2), s/veh	4.5	0.5	0.8	1.3	2.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.4	2.5	1.6	2.3	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.0	8.7	14.9	14.4	18.6	19.2
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		1055	1073		394	
Approach Delay, s/veh		11.5	14.8		18.9	
Approach LOS		B	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		37.5		22.5	10.3	27.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		33.0		18.0	10.1	18.4
Max Q Clear Time (g_c+I1), s		11.4		7.8	6.4	9.9
Green Ext Time (p_c), s		5.9		0.9	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	877	149	98	857	41	92	1	60	20	2	24
Future Volume (vph)	41	877	149	98	857	41	92	1	60	20	2	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	43	923	157	103	902	43	97	1	63	21	2	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	1080	0	103	902	43	0	98	63	0	23	25
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	23.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	877	149	98	857	41	92	1	60	20	2	24
Future Vol, veh/h	41	877	149	98	857	41	92	1	60	20	2	24
Conflicting Peds, #/hr	5	0	0	0	0	5	0	0	0	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	190	-	-	150	-	110	-	-	150	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	923	157	103	902	43	97	1	63	21	2	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	950	0	0	1080	0	0	1661	2244	545	1666	2279	461
Stage 1	-	-	-	-	-	-	1088	1088	-	1113	1113	-
Stage 2	-	-	-	-	-	-	573	1156	-	553	1166	-
Critical Hdwy	5.34	-	-	4.14	-	-	6.99	6.54	6.94	6.99	6.54	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	7.34	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	5.54	-	6.54	5.54	-
Follow-up Hdwy	3.12	-	-	2.22	-	-	3.67	4.02	3.32	3.67	4.02	3.92
Pot Cap-1 Maneuver	414	-	-	641	-	-	~ 81	41	482	80	39	468
Stage 1	-	-	-	-	-	-	225	290	-	170	282	-
Stage 2	-	-	-	-	-	-	443	269	-	470	266	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	412	-	-	641	-	-	~ 58	31	480	54	29	464
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 58	31	-	54	29	-
Stage 1	-	-	-	-	-	-	202	260	-	151	235	-
Stage 2	-	-	-	-	-	-	347	225	-	362	238	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.2	$ 311.2	68.2
HCM LOS			F	F

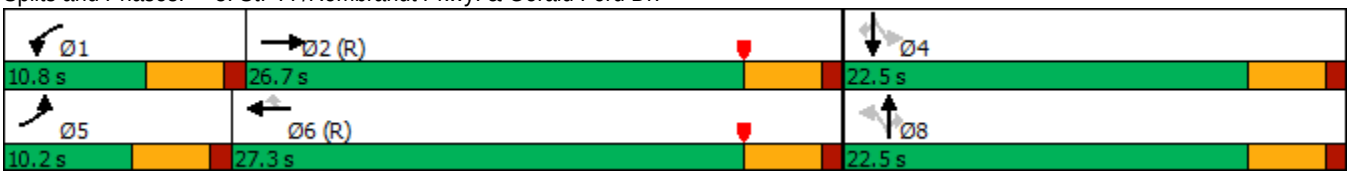
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	57	480	412	-	-	641	-	-	50	464
HCM Lane V/C Ratio	1.717	0.132	0.105	-	-	0.161	-	-	0.463	0.054
HCM Control Delay (s)	$ 503.2	13.6	14.8	-	-	11.7	-	-	128.2	13.2
HCM Lane LOS	F	B	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	9.1	0.5	0.3	-	-	0.6	-	-	1.7	0.2

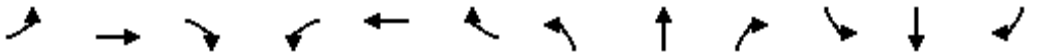
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	877	149	98	857	41	92	1	60	20	2	24
Future Volume (vph)	41	877	149	98	857	41	92	1	60	20	2	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	150		110	0		150	0		50
Storage Lanes	1		0	1		1	0		1	0		1
Taper Length (ft)	120			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		2201			915			434			430	
Travel Time (s)		30.0			12.5			9.9			9.8	
Confl. Peds. (#/hr)	5					5				5		5
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
Adj. Flow (vph)	43	923	157	103	902	43	97	1	63	21	2	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	1080	0	103	902	43	0	98	63	0	23	25
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases						6	8		8	4		4
Detector Phase	5	2		1	6	6	8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.2	26.7		10.8	27.3	27.3	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (%)	17.0%	44.5%		18.0%	45.5%	45.5%	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5		4.5	4.5		4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max		None	C-Max	C-Max	Max	Max	Max	Max	Max	Max

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: St. "A"/Rembrandt Pkwy. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	877	149	98	857	41	92	1	60	20	2	24
Future Volume (veh/h)	41	877	149	98	857	41	92	1	60	20	2	24
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	923	157	103	902	43	97	1	63	21	2	25
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1216	207	132	2208	681	119	1	476	115	6	473
Arrive On Green	0.01	0.13	0.13	0.07	0.43	0.43	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3035	516	1781	5106	1576	0	2	1585	0	20	1577
Grp Volume(v), veh/h	43	540	540	103	902	43	98	0	63	23	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1774	1781	1702	1576	2	0	1585	20	0	1577
Q Serve(g_s), s	1.4	17.6	17.6	3.4	7.3	1.0	0.0	0.0	1.7	0.0	0.0	0.7
Cycle Q Clear(g_c), s	1.4	17.6	17.6	3.4	7.3	1.0	18.0	0.0	1.7	18.0	0.0	0.7
Prop In Lane	1.00		0.29	1.00		1.00	0.99		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	76	712	711	132	2208	681	120	0	476	121	0	473
V/C Ratio(X)	0.57	0.76	0.76	0.78	0.41	0.06	0.82	0.00	0.13	0.19	0.00	0.05
Avail Cap(c_a), veh/h	169	712	711	187	2208	681	120	0	476	121	0	473
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	23.2	23.2	27.3	11.7	9.9	29.9	0.0	15.3	25.4	0.0	14.9
Incr Delay (d2), s/veh	5.8	6.7	6.7	12.6	0.6	0.2	43.6	0.0	0.6	3.5	0.0	0.2
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	0.7	9.3	9.3	1.7	2.2	0.3	2.8	0.0	0.7	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	29.9	29.9	39.9	12.3	10.1	73.5	0.0	15.9	28.9	0.0	15.1
LnGrp LOS	C	C	C	D	B	B	E	A	B	C	A	B
Approach Vol, veh/h		1123			1048			161			48	
Approach Delay, s/veh		30.1			14.9			51.0			21.7	
Approach LOS		C			B			D			C	

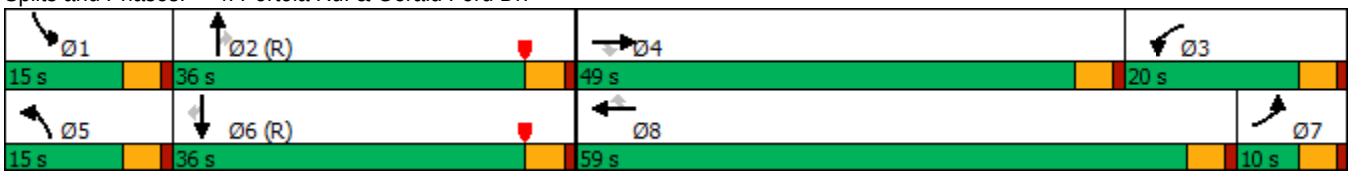
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	28.5		22.5	7.1	30.4		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.3	22.2		18.0	5.7	22.8		18.0				
Max Q Clear Time (g_c+I1), s	5.4	19.6		20.0	3.4	9.3		20.0				
Green Ext Time (p_c), s	0.0	1.5		0.0	0.0	4.8		0.0				

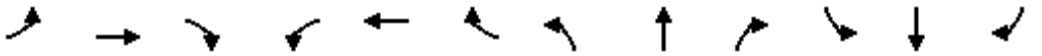
Intersection Summary			
HCM 6th Ctrl Delay		24.7	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	718	221	184	790	142	202	508	208	168	486	11
Future Volume (vph)	8	718	221	184	790	142	202	508	208	168	486	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	165		50	255		300	245		205	255		215
Storage Lanes	1		1	2		1	2		1	2		0
Taper Length (ft)	90			120			120			110		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		658			1639			1684			1545	
Travel Time (s)		9.0			22.4			20.9			19.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	780	240	200	859	154	220	552	226	183	528	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	780	240	200	859	154	220	552	226	183	528	12
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	10.0	49.0	49.0	20.0	59.0	59.0	15.0	36.0	36.0	15.0	36.0	36.0
Total Split (%)	8.3%	40.8%	40.8%	16.7%	49.2%	49.2%	12.5%	30.0%	30.0%	12.5%	30.0%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 45 (38%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 4: Portola Rd. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	718	221	184	790	142	202	508	208	168	486	11
Future Volume (veh/h)	8	718	221	184	790	142	202	508	208	168	486	11
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	780	240	200	859	0	220	552	226	183	528	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	949	421	259	1085		278	2239	693	240	2184	
Arrive On Green	0.13	0.27	0.27	0.15	0.42	0.00	0.03	0.14	0.14	0.07	0.43	0.00
Sat Flow, veh/h	1781	3554	1576	3456	5106	1585	3456	5106	1580	3456	5106	1585
Grp Volume(v), veh/h	9	780	240	200	859	0	220	552	226	183	528	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1728	1702	1585	1728	1702	1580	1728	1702	1585
Q Serve(g_s), s	0.5	24.7	12.4	6.7	17.5	0.0	7.6	11.5	11.3	6.2	7.9	0.0
Cycle Q Clear(g_c), s	0.5	24.7	12.4	6.7	17.5	0.0	7.6	11.5	11.3	6.2	7.9	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	231	949	421	259	1085		278	2239	693	240	2184	
V/C Ratio(X)	0.04	0.82	0.57	0.77	0.79		0.79	0.25	0.33	0.76	0.24	
Avail Cap(c_a), veh/h	231	1318	584	446	2319		302	2239	693	302	2184	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.00	0.96	0.96	0.96	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.7	41.3	23.6	50.0	32.2	0.0	57.4	33.7	19.0	54.9	21.9	0.0
Incr Delay (d2), s/veh	0.1	3.0	1.2	4.2	1.1	0.0	12.0	0.3	1.2	8.5	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	0.2	10.7	4.5	2.8	5.5	0.0	3.8	5.0	4.6	2.9	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	44.3	24.8	54.2	33.3	0.0	69.4	34.0	20.2	63.3	22.2	0.0
LnGrp LOS	D	D	C	D	C		E	C	C	E	C	
Approach Vol, veh/h		1029			1059	A		998			711	A
Approach Delay, s/veh		39.8			37.3			38.7			32.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	57.1	13.5	36.5	14.2	55.8	20.0	30.0
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	10.5	31.5	15.5	44.5	10.5	31.5	5.5	54.5
Max Q Clear Time (g_c+I1), s	8.2	13.5	8.7	26.7	9.6	9.9	2.5	19.5
Green Ext Time (p_c), s	0.1	3.7	0.3	5.3	0.1	3.0	0.0	6.0

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

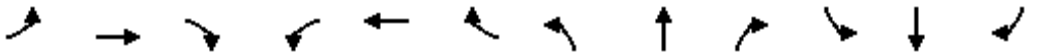
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	737	44	28	765	339	54	158	17	345	153	297
Future Volume (vph)	314	737	44	28	765	339	54	158	17	345	153	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	140		150	140		150	120		0	130		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	90			100			90			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			40			30			30	
Link Distance (ft)		1639			1573			599			673	
Travel Time (s)		22.4			26.8			13.6			15.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	345	810	48	31	841	373	59	174	19	379	168	326
Shared Lane Traffic (%)												
Lane Group Flow (vph)	345	810	48	31	841	373	59	193	0	379	494	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Detector Phase	5	2	2	1	6	6	8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5		22.5	22.5	
Total Split (s)	14.0	27.7	27.7	9.8	23.5	23.5	22.5	22.5		22.5	22.5	
Total Split (%)	23.3%	46.2%	46.2%	16.3%	39.2%	39.2%	37.5%	37.5%		37.5%	37.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 5: Pacific Av. & Gerald Ford Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	314	737	44	28	765	339	54	158	17	345	153	297
Future Volume (veh/h)	314	737	44	28	765	339	54	158	17	345	153	297
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	345	810	48	31	841	373	59	174	19	379	168	326
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	282	2254	697	60	1617	500	226	970	105	428	533	473
Arrive On Green	0.05	0.15	0.15	0.03	0.32	0.32	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	5106	1580	1781	5106	1578	901	3234	349	1186	1777	1577
Grp Volume(v), veh/h	345	810	48	31	841	373	59	95	98	379	168	326
Grp Sat Flow(s),veh/h/ln	1781	1702	1580	1781	1702	1578	901	1777	1806	1186	1777	1577
Q Serve(g_s), s	9.5	8.6	1.6	1.0	8.1	12.7	3.7	2.4	2.4	15.6	4.4	10.9
Cycle Q Clear(g_c), s	9.5	8.6	1.6	1.0	8.1	12.7	14.7	2.4	2.4	18.0	4.4	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	282	2254	697	60	1617	500	226	533	542	428	533	473
V/C Ratio(X)	1.22	0.36	0.07	0.52	0.52	0.75	0.26	0.18	0.18	0.89	0.32	0.69
Avail Cap(c_a), veh/h	282	2254	697	157	1617	500	226	533	542	428	533	473
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	18.0	15.0	28.5	16.8	18.3	25.0	15.5	15.5	23.7	16.2	18.5
Incr Delay (d2), s/veh	121.1	0.3	0.1	6.8	1.2	9.8	2.8	0.7	0.7	22.6	1.5	8.0
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	13.4	3.1	0.5	0.5	2.9	5.3	0.9	1.0	1.0	7.9	1.9	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	149.5	18.3	15.1	35.3	18.0	28.1	27.8	16.3	16.3	46.3	17.8	26.5
LnGrp LOS	F	B	B	D	B	C	C	B	B	D	B	C
Approach Vol, veh/h		1203			1245			252			873	
Approach Delay, s/veh		55.8			21.4			19.0			33.4	
Approach LOS		E			C			B			C	

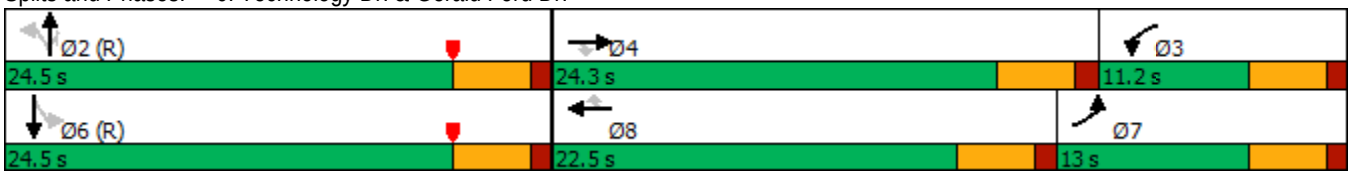
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	31.0		22.5	14.0	23.5		22.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.3	23.2		18.0	9.5	19.0		18.0				
Max Q Clear Time (g_c+I1), s	3.0	10.6		20.0	11.5	14.7		16.7				
Green Ext Time (p_c), s	0.0	4.1		0.0	0.0	2.5		0.2				

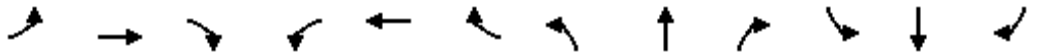
Intersection Summary												
HCM 6th Ctrl Delay			35.8									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	778	144	106	722	62	204	30	103	96	32	207
Future Volume (vph)	177	778	144	106	722	62	204	30	103	96	32	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		165	175		120	102		0	85		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1634			919			541			642	
Travel Time (s)		27.9			15.7			10.5			12.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	195	855	158	116	793	68	224	33	113	105	35	227
Shared Lane Traffic (%)												
Lane Group Flow (vph)	195	855	158	116	793	68	224	33	113	105	262	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2		2	6		
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	
Total Split (s)	13.0	24.3	24.3	11.2	22.5	22.5	24.5	24.5	24.5	24.5	24.5	
Total Split (%)	21.7%	40.5%	40.5%	18.7%	37.5%	37.5%	40.8%	40.8%	40.8%	40.8%	40.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 6: Technology Dr. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	778	144	106	722	62	204	30	103	96	32	207
Future Volume (veh/h)	177	778	144	106	722	62	204	30	103	96	32	207
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		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	195	855	158	116	793	68	224	33	113	105	35	227
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	239	1294	398	214	1220	375	439	751	634	604	87	561
Arrive On Green	0.13	0.25	0.25	0.04	0.08	0.08	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	5106	1569	1781	5106	1568	1115	1870	1579	1238	215	1397
Grp Volume(v), veh/h	195	855	158	116	793	68	224	33	113	105	0	262
Grp Sat Flow(s),veh/h/ln	1781	1702	1569	1781	1702	1568	1115	1870	1579	1238	0	1613
Q Serve(g_s), s	6.4	9.0	5.0	3.8	9.0	2.4	10.8	0.6	2.8	3.4	0.0	7.0
Cycle Q Clear(g_c), s	6.4	9.0	5.0	3.8	9.0	2.4	17.7	0.6	2.8	4.0	0.0	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.87
Lane Grp Cap(c), veh/h	239	1294	398	214	1220	375	439	751	634	604	0	648
V/C Ratio(X)	0.81	0.66	0.40	0.54	0.65	0.18	0.51	0.04	0.18	0.17	0.00	0.40
Avail Cap(c_a), veh/h	252	1685	518	214	1532	471	439	751	634	604	0	648
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.2	20.1	18.6	27.2	25.2	22.2	19.2	10.9	11.6	12.2	0.0	12.8
Incr Delay (d2), s/veh	17.5	0.6	0.6	2.2	0.5	0.2	4.2	0.1	0.6	0.6	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.2	1.7	1.7	3.7	0.8	3.0	0.3	0.9	0.9	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	20.7	19.2	29.4	25.7	22.3	23.4	11.0	12.2	12.8	0.0	14.7
LnGrp LOS	D	C	B	C	C	C	C	B	B	B	A	B
Approach Vol, veh/h		1208			977			370			367	
Approach Delay, s/veh		24.1			25.9			18.9			14.2	
Approach LOS		C			C			B			B	

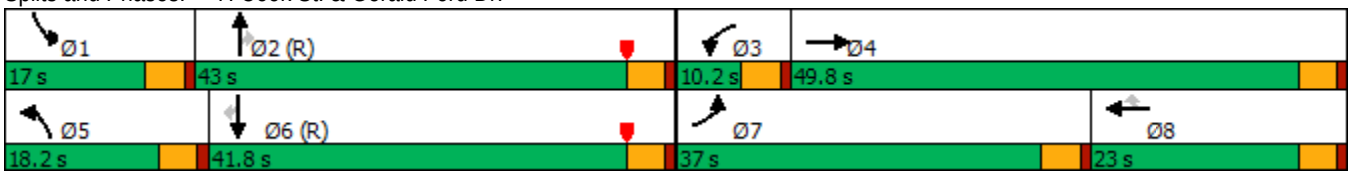
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		28.6	11.7	19.7		28.6	12.6	18.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		20.0	6.7	19.8		20.0	8.5	18.0				
Max Q Clear Time (g_c+I1), s		19.7	5.8	11.0		9.0	8.4	11.0				
Green Ext Time (p_c), s		0.0	0.0	3.9		1.5	0.0	3.0				

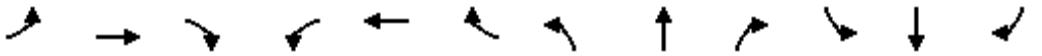
Intersection Summary												
HCM 6th Ctrl Delay			22.8									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	605	331	139	64	306	175	216	1123	28	184	786	405
Future Volume (vph)	605	331	139	64	306	175	216	1123	28	184	786	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		230	160		200	210		120	290		360
Storage Lanes	2		0	2		1	2		1	2		1
Taper Length (ft)	130			160			140			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		40			50			55			55	
Link Distance (ft)		919			837			1057			824	
Travel Time (s)		15.7			11.4			13.1			10.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	644	352	148	68	326	186	230	1195	30	196	836	431
Shared Lane Traffic (%)												
Lane Group Flow (vph)	644	352	148	68	326	186	230	1195	30	196	836	431
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	37.0	49.8		10.2	23.0	23.0	18.2	43.0	43.0	17.0	41.8	41.8
Total Split (%)	30.8%	41.5%		8.5%	19.2%	19.2%	15.2%	35.8%	35.8%	14.2%	34.8%	34.8%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Cook St. & Gerald Ford Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	605	331	139	64	306	175	216	1123	28	184	786	405
Future Volume (veh/h)	605	331	139	64	306	175	216	1123	28	184	786	405
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		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	644	352	0	68	326	186	230	1195	30	196	836	431
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	718	1103		129	497	219	290	2188	677	255	2136	661
Arrive On Green	0.35	0.52	0.00	0.04	0.14	0.14	0.08	0.43	0.43	0.07	0.42	0.42
Sat Flow, veh/h	3456	3554	1585	3456	3554	1568	3456	5106	1580	3456	5106	1579
Grp Volume(v), veh/h	644	352	0	68	326	186	230	1195	30	196	836	431
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1568	1728	1702	1580	1728	1702	1579
Q Serve(g_s), s	21.2	6.9	0.0	2.3	10.4	13.9	7.8	21.0	1.3	6.7	13.7	26.2
Cycle Q Clear(g_c), s	21.2	6.9	0.0	2.3	10.4	13.9	7.8	21.0	1.3	6.7	13.7	26.2
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	718	1103		129	497	219	290	2188	677	255	2136	661
V/C Ratio(X)	0.90	0.32		0.53	0.66	0.85	0.79	0.55	0.04	0.77	0.39	0.65
Avail Cap(c_a), veh/h	936	1342		164	548	242	395	2188	677	360	2136	661
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	21.6	0.0	56.7	48.9	50.4	53.9	25.6	20.0	54.6	24.3	27.9
Incr Delay (d2), s/veh	8.4	0.1	0.0	3.3	2.5	22.1	7.6	1.0	0.1	6.3	0.5	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	8.4	2.6	0.0	1.0	4.6	6.6	3.6	8.0	0.5	3.0	5.2	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	21.7	0.0	60.0	51.4	72.5	61.5	26.6	20.1	60.8	24.8	32.9
LnGrp LOS	D	C		E	D	E	E	C	C	E	C	C
Approach Vol, veh/h		996	A		580			1455			1463	
Approach Delay, s/veh		37.6			59.1			32.0			32.0	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	55.9	9.0	41.7	14.6	54.7	29.4	21.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	38.5	5.7	45.3	13.7	37.3	32.5	18.5
Max Q Clear Time (g_c+I1), s	8.7	23.0	4.3	8.9	9.8	28.2	23.2	15.9
Green Ext Time (p_c), s	0.2	6.7	0.0	2.3	0.3	4.4	1.7	0.7

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

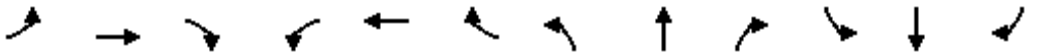
Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	44	73	87	54	41	109	816	76	99	725	67
Future Volume (vph)	67	44	73	87	54	41	109	816	76	99	725	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		60	145		100	165		165	165		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			120			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			55			55	
Link Distance (ft)		1594			463			3682			1684	
Travel Time (s)		36.2			10.5			45.6			20.9	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	48	79	95	59	45	118	887	83	108	788	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	127	0	95	59	45	118	887	83	108	861	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			
Detector Phase	4	4		8	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	
Total Split (s)	36.0	36.0		36.0	36.0	36.0	31.0	54.0	54.0	30.0	53.0	
Total Split (%)	30.0%	30.0%		30.0%	30.0%	30.0%	25.8%	45.0%	45.0%	25.0%	44.2%	
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Portola Rd. & Julie Dr./College Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	44	73	87	54	41	109	816	76	99	725	67
Future Volume (veh/h)	67	44	73	87	54	41	109	816	76	99	725	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	48	79	95	59	45	118	887	83	108	788	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	104	171	180	307	258	146	3304	1022	136	3050	281
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.08	0.65	0.65	0.03	0.21	0.21
Sat Flow, veh/h	1281	632	1040	1257	1870	1571	1781	5106	1579	1781	4755	438
Grp Volume(v), veh/h	73	0	127	95	59	45	118	887	83	108	563	298
Grp Sat Flow(s),veh/h/ln	1281	0	1672	1257	1870	1571	1781	1702	1579	1781	1702	1789
Q Serve(g_s), s	6.3	0.0	8.2	8.9	3.3	3.0	7.8	8.9	2.4	7.2	16.5	16.7
Cycle Q Clear(g_c), s	9.5	0.0	8.2	17.1	3.3	3.0	7.8	8.9	2.4	7.2	16.5	16.7
Prop In Lane	1.00		0.62	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	235	0	274	180	307	258	146	3304	1022	136	2183	1148
V/C Ratio(X)	0.31	0.00	0.46	0.53	0.19	0.17	0.81	0.27	0.08	0.79	0.26	0.26
Avail Cap(c_a), veh/h	361	0	439	304	491	412	393	3304	1022	379	2183	1148
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77	0.93	0.93	0.93
Uniform Delay (d), s/veh	47.4	0.0	45.4	53.1	43.3	43.2	54.1	9.0	7.9	57.5	23.5	23.5
Incr Delay (d2), s/veh	0.7	0.0	1.2	2.4	0.3	0.3	7.9	0.2	0.1	9.2	0.3	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	2.1	0.0	3.5	2.9	1.5	1.2	3.7	2.8	0.7	3.6	7.5	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	0.0	46.6	55.5	43.6	43.5	62.0	9.2	8.0	66.8	23.7	24.0
LnGrp LOS	D	A	D	E	D	D	E	A	A	E	C	C
Approach Vol, veh/h		200			199			1088			969	
Approach Delay, s/veh		47.2			49.3			14.8			28.6	
Approach LOS		D			D			B			C	

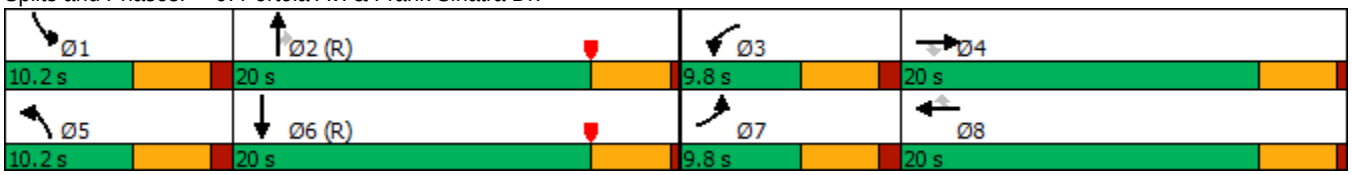
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	82.1		24.2	14.3	81.5		24.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	25.5	49.5		31.5	26.5	48.5		31.5				
Max Q Clear Time (g_c+I1), s	9.2	10.9		11.5	9.8	18.7		19.1				
Green Ext Time (p_c), s	0.2	6.4		0.9	0.2	5.2		0.6				

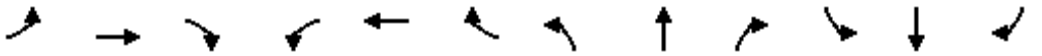
Intersection Summary			
HCM 6th Ctrl Delay		25.7	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	666	124	132	401	33	145	864	111	86	698	101
Future Volume (vph)	123	666	124	132	401	33	145	864	111	86	698	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	120		230	140		100	260		50	180		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	120			90			120			190		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		701			1558			512			3682	
Travel Time (s)		9.6			21.2			6.3			45.6	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	131	709	132	140	427	35	154	919	118	91	743	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	709	132	140	427	35	154	919	118	91	850	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	
Total Split (s)	9.8	20.0	20.0	9.8	20.0	20.0	10.2	20.0	20.0	10.2	20.0	
Total Split (%)	16.3%	33.3%	33.3%	16.3%	33.3%	33.3%	17.0%	33.3%	33.3%	17.0%	33.3%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Portola Av. & Frank Sinatra Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	666	124	132	401	33	145	864	111	86	698	101
Future Volume (veh/h)	123	666	124	132	401	33	145	864	111	86	698	101
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	709	132	140	427	35	154	919	118	91	743	107
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	869	385	157	869	385	169	1626	502	117	1303	186
Arrive On Green	0.09	0.24	0.24	0.09	0.24	0.24	0.09	0.32	0.32	0.07	0.29	0.29
Sat Flow, veh/h	1781	3554	1575	1781	3554	1575	1781	5106	1578	1781	4510	644
Grp Volume(v), veh/h	131	709	132	140	427	35	154	919	118	91	559	291
Grp Sat Flow(s),veh/h/ln	1781	1777	1575	1781	1777	1575	1781	1702	1578	1781	1702	1750
Q Serve(g_s), s	4.3	11.3	4.1	4.7	6.2	1.0	5.1	9.0	3.3	3.0	8.4	8.5
Cycle Q Clear(g_c), s	4.3	11.3	4.1	4.7	6.2	1.0	5.1	9.0	3.3	3.0	8.4	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	157	869	385	157	869	385	169	1626	502	117	983	506
V/C Ratio(X)	0.83	0.82	0.34	0.89	0.49	0.09	0.91	0.57	0.23	0.78	0.57	0.58
Avail Cap(c_a), veh/h	157	948	420	157	948	420	169	1626	502	169	983	506
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	0.96	0.96	0.96
Uniform Delay (d), s/veh	26.9	21.4	18.7	27.1	19.5	17.5	26.9	17.0	15.1	27.6	18.2	18.2
Incr Delay (d2), s/veh	30.0	5.2	0.5	41.6	0.4	0.1	44.2	1.4	1.1	12.9	2.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.5	1.3	3.5	2.2	0.3	3.9	3.0	1.1	1.5	2.9	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	26.6	19.2	68.6	19.9	17.6	71.1	18.4	16.2	40.5	20.4	22.7
LnGrp LOS	E	C	B	E	B	B	E	B	B	D	C	C
Approach Vol, veh/h		972			602			1191			941	
Approach Delay, s/veh		29.7			31.1			25.0			23.1	
Approach LOS		C			C			C			C	

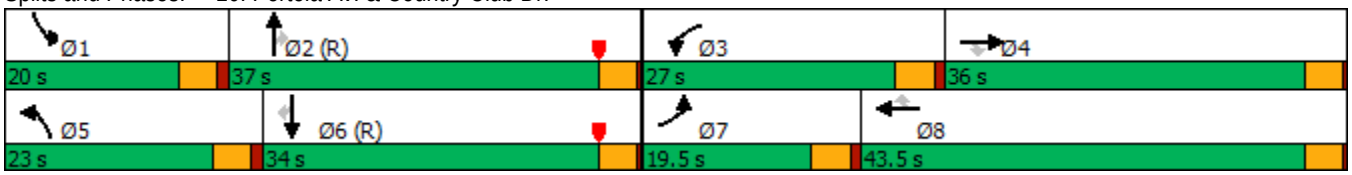
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	23.1	9.8	18.7	10.2	21.3	9.8	18.7
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	5.7	16.0	5.3	16.0	5.7	16.0	5.3	16.0
Max Q Clear Time (g_c+I1), s	5.0	11.0	6.7	13.3	7.1	10.5	6.3	8.2
Green Ext Time (p_c), s	0.0	2.5	0.0	1.3	0.0	2.3	0.0	1.5

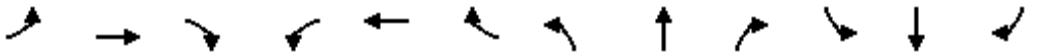
Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	851	245	263	623	250	220	785	237	180	675	113
Future Volume (vph)	108	851	245	263	623	250	220	785	237	180	675	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		105	180		80	160		135	200		50
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	120			90			100			60		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		50			50			55			55	
Link Distance (ft)		1030			784			945			2578	
Travel Time (s)		14.0			10.7			11.7			32.0	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	111	877	253	271	642	258	227	809	244	186	696	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	877	253	271	642	258	227	809	244	186	696	116
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0
Minimum Split (s)	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0	9.5	20.0	20.0
Total Split (s)	19.5	36.0	36.0	27.0	43.5	43.5	23.0	37.0	37.0	20.0	34.0	34.0
Total Split (%)	16.3%	30.0%	30.0%	22.5%	36.3%	36.3%	19.2%	30.8%	30.8%	16.7%	28.3%	28.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0	4.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 10: Portola Av. & Country Club Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	851	245	263	623	250	220	785	237	180	675	113
Future Volume (veh/h)	108	851	245	263	623	250	220	785	237	180	675	113
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	877	253	271	642	258	227	809	244	186	696	116
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	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	936	415	299	1259	559	254	1093	485	213	1011	449
Arrive On Green	0.08	0.26	0.26	0.17	0.35	0.35	0.14	0.31	0.31	0.12	0.28	0.28
Sat Flow, veh/h	1781	3554	1576	1781	3554	1578	1781	3554	1577	1781	3554	1577
Grp Volume(v), veh/h	111	877	253	271	642	258	227	809	244	186	696	116
Grp Sat Flow(s),veh/h/ln	1781	1777	1576	1781	1777	1578	1781	1777	1577	1781	1777	1577
Q Serve(g_s), s	7.4	29.0	16.9	17.9	17.1	15.1	15.0	24.5	15.2	12.3	20.9	6.8
Cycle Q Clear(g_c), s	7.4	29.0	16.9	17.9	17.1	15.1	15.0	24.5	15.2	12.3	20.9	6.8
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	137	936	415	299	1259	559	254	1093	485	213	1011	449
V/C Ratio(X)	0.81	0.94	0.61	0.91	0.51	0.46	0.89	0.74	0.50	0.87	0.69	0.26
Avail Cap(c_a), veh/h	223	948	420	334	1259	559	275	1093	485	230	1011	449
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	54.5	43.2	38.8	49.0	30.5	29.9	50.6	37.2	34.0	51.9	38.2	33.1
Incr Delay (d2), s/veh	10.8	16.1	2.5	25.7	0.3	0.6	27.5	4.5	3.7	27.5	3.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	14.2	6.5	9.8	7.0	5.6	8.3	10.7	6.1	6.9	9.1	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.3	59.3	41.3	74.8	30.9	30.5	78.1	41.7	37.7	79.5	42.0	34.5
LnGrp LOS	E	E	D	E	C	C	E	D	D	E	D	C
Approach Vol, veh/h		1241			1171			1280			998	
Approach Delay, s/veh		56.1			41.0			47.4			48.1	
Approach LOS		E			D			D			D	

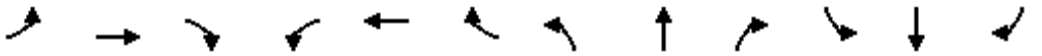
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	40.9	24.6	35.6	21.6	38.2	13.7	46.5
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	15.5	33.0	22.5	32.0	18.5	30.0	15.0	39.5
Max Q Clear Time (g_c+I1), s	14.3	26.5	19.9	31.0	17.0	22.9	9.4	19.1
Green Ext Time (p_c), s	0.1	3.0	0.2	0.7	0.1	2.6	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	555	432	303	148	496	884	338	1381	133	601	1201	350
Future Volume (vph)	555	432	303	148	496	884	338	1381	133	601	1201	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		190	160		180	255		0	170		240
Storage Lanes	2		0	2		1	2		0	2		1
Taper Length (ft)	120			120			170			120		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		738			1225			3625			489	
Travel Time (s)		11.2			18.6			44.9			6.1	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Adj. Flow (vph)	572	445	312	153	511	911	348	1424	137	620	1238	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	572	445	312	153	511	911	348	1561	0	620	1238	361
Turn Type	Prot	NA	Perm	Prot	NA	Free	Prot	NA		Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			Free						Free
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	26.0	34.5	34.5	14.6	23.1		23.4	43.3		27.6	47.5	
Total Split (%)	21.7%	28.8%	28.8%	12.2%	19.3%		19.5%	36.1%		23.0%	39.6%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	

Splits and Phases: 11: Monterey Av. & Dinah Shore Dr.



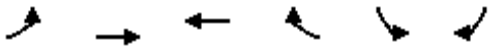
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	432	303	148	496	884	338	1381	133	601	1201	350
Future Volume (veh/h)	555	432	303	148	496	884	338	1381	133	601	1201	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	572	445	312	153	511	0	348	1424	137	620	1238	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	619	972	431	210	551		414	1531	147	665	2022	
Arrive On Green	0.18	0.27	0.27	0.06	0.15	0.00	0.12	0.32	0.32	0.19	0.40	0.00
Sat Flow, veh/h	3456	3554	1576	3456	3554	1585	3456	4735	455	3456	5106	1585
Grp Volume(v), veh/h	572	445	312	153	511	0	348	1024	537	620	1238	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1576	1728	1777	1585	1728	1702	1786	1728	1702	1585
Q Serve(g_s), s	19.5	12.5	21.5	5.2	17.0	0.0	11.8	34.9	34.9	21.2	23.2	0.0
Cycle Q Clear(g_c), s	19.5	12.5	21.5	5.2	17.0	0.0	11.8	34.9	34.9	21.2	23.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	619	972	431	210	551		414	1101	577	665	2022	
V/C Ratio(X)	0.92	0.46	0.72	0.73	0.93		0.84	0.93	0.93	0.93	0.61	
Avail Cap(c_a), veh/h	619	972	431	291	551		544	1101	577	665	2022	
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	48.4	36.2	39.5	55.4	50.0	0.0	51.7	39.3	39.3	47.7	28.9	0.0
Incr Delay (d2), s/veh	19.7	0.3	5.9	5.7	22.1	0.0	8.9	14.8	23.7	20.0	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	9.8	5.3	8.7	2.4	9.0	0.0	5.4	15.8	18.1	10.5	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.2	36.5	45.4	61.0	72.2	0.0	60.6	54.1	63.0	67.7	30.3	0.0
LnGrp LOS	E	D	D	E	E		E	D	E	E	C	
Approach Vol, veh/h		1329			664	A		1909			1858	A
Approach Delay, s/veh		52.2			69.6			57.8			42.8	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.6	43.3	11.8	37.3	18.9	52.0	26.0	23.1
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	23.1	38.8	10.1	30.0	18.9	43.0	21.5	18.6
Max Q Clear Time (g_c+I1), s	23.2	36.9	7.2	23.5	13.8	25.2	21.5	19.0
Green Ext Time (p_c), s	0.0	1.4	0.1	2.1	0.5	7.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	81	47	75	88	70	132
Future Volume (vph)	81	47	75	88	70	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		30	30		30	
Link Distance (ft)		254	1594		1667	
Travel Time (s)		5.8	36.2		37.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	51	82	96	76	143
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	139	178	0	219	0
Sign Control		Yield	Yield		Yield	

Intersection Summary	
Area Type:	Other

Control Type: Roundabout

Intersection	
Intersection Delay, s/veh	4.2
Intersection LOS	A

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	139	178	219
Demand Flow Rate, veh/h	142	182	224
Vehicles Circulating, veh/h	78	90	84
Vehicles Exiting, veh/h	230	130	188
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	3.8	4.1	4.4
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	142	182	224
Cap Entry Lane, veh/h	1274	1259	1267
Entry HV Adj Factor	0.979	0.980	0.978
Flow Entry, veh/h	139	178	219
Cap Entry, veh/h	1247	1234	1238
V/C Ratio	0.111	0.145	0.177
Control Delay, s/veh	3.8	4.1	4.4
LOS	A	A	A
95th %tile Queue, veh	0	1	1

Intersection: 8: Portola Rd. & Julie Dr./College Dr.

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	86	159	99	52	36	63	70	73	101	28	59	55
Average Queue (ft)	53	103	67	15	17	33	33	35	43	7	25	25
95th Queue (ft)	87	171	104	57	36	70	74	78	104	27	57	61
Link Distance (ft)		1441		386			3589	3589	3589			1572
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125		145		100	165				165	165	
Storage Blk Time (%)		5										
Queuing Penalty (veh)		2										

Intersection: 8: Portola Rd. & Julie Dr./College Dr.

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	78	76
Average Queue (ft)	35	39
95th Queue (ft)	75	80
Link Distance (ft)	1572	1572
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Portola Rd. & Julie Dr./College Dr.

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	100	127	108	78	48	133	130	100	144	42	101	121
Average Queue (ft)	58	65	71	46	16	91	42	36	54	7	65	52
95th Queue (ft)	99	121	121	92	45	145	109	93	135	29	106	116
Link Distance (ft)		1441		386			3589	3589	3589			1572
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125		145		100	165				165	165	
Storage Blk Time (%)	0	2	0	0		0	0		0			0
Queuing Penalty (veh)	0	1	0	0		0	0		0			0

Intersection: 8: Portola Rd. & Julie Dr./College Dr.

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	158	161
Average Queue (ft)	69	82
95th Queue (ft)	151	153
Link Distance (ft)	1572	1572
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		