Appendix A – Level of Service Methodology

APPENDIX A
LEVEL OF SERVICE

The description and procedures for calculating capacity and level of service (LOS) are found in Transportation Research Board, Highway Capacity Manual (HCM) 2010. HCM 2010 represents the latest research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. The criteria for the automobile mode are different from those for the nonautomobile modes. Specifically, the automobile-mode criteria are based on performance measures that are field measurable and perceivable by travelers. The criteria for the nunautomobile modes are based on scores reported by travelers indicating their perception of service quality.

Automobile Mode – Signalized Intersection
LOS can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group. The following paragraphs describe each LOS.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater that 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

Table 1 lists the LOS thresholds established for the automobile mode at a signalized intersection.

Table 1: LOS Criteria - Automobile Mode

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[1]	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10-20	B	F
> 20-35	C	F
> 35-55	D	F
> 55-80	E	F
> 80	F	F

Note: [1] For approach-based and intersectionwide assessments, LOS is defined solely by control delay
Source: HCM 2010, Transportation Research Board

Nonautomobile Modes

Historically, the HCM has used a single performance measure as the basis for defining LOS. However, research documented in Chapter 5, Quality and Level-of-Service Concepts, indicates that travelers consider a wide variety of factors in assessing the quality of service provided to them. Some of these factors can be described as performance measures (e.g., speed) and others can be described as basic descriptors of the intersection character (e.g., crosswalk width). The methodology for evaluating each mode provides a procedure for mathematically combining these factors into a score. This score is then used to determine the LOS that is provided.

Table 2 lists the range of scores associated with each LOS for the pedestrian and bicycle travel modes. The association between score value and LOS is based on traveler perception research. Travelers were asked to rate the quality of service associated with a specific trip through a signalized intersection. The letter A was used to represent the best quality of service, and the letter F was used to represent the worst quality of service. “Best” and “worst” were left undefined, allowing respondents to identify the best and worst conditions on the basis of their traveling experience and perception of service quality.

Table 2: LOS Criteria - Pedestrian and Bicycle Modes

LOS	LOS Score
A	≤ 2.00
B	> 2.00-2.75
C	> 2.75-3.50
D	> 3.50-4.25
E	> 4.25-5.00
F	> 5.00

Source: HCM 2010, Transportation Research Board

Pedestrian Mode

Intersection performance is separately evaluated for each crosswalk and intersection corner with this methodology. A crosswalk is assumed to exist across each intersection leg unless crossing is specifically prohibited by local ordinance (and signed to this effect). The pedestrian methodology is applied through a series of five steps that determine the pedestrian LOS for a crosswalk and associated corners:

1. Determine Street Corner Circulation Area
2. Determine Crosswalk Circulation Area
3. Determine Pedestrian Delay
4. Determine Pedestrian LOS Score for Intersection
5. Determine LOS

Bicycle Mode

Intersection performance is evaluated separately for each intersection approach. The bicycle is assumed to travel in the street (possibly in a bicycle lane) and in the same direction as akjacent motorized vehicles. The methodology is focused on analyzing signalized intersection performance from the bicyclist point of view. The bicycle methodology is applied through a series of three steps that determine the bicycle LOS for an intersection approach:

1. Determine Bicycle Delay
2. Determine Bicycle LOS Score for Intersection
3. Determine LOS

Two-Way Stop Controlled Intersection

LOS for a two-way stop control (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns by using criteria in Table 3. LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons: (*a*) major-street through vehicles are assumed to experience zero delay; (*b*) the disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles; and (*c*) the resulting low delay can mask important LOS deficiencies for minor movements. As Table 3 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The LOS criteria for TWSC intersections differ from that of signalized intersections, primarily because user perceptions differ among transportation facility types. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will present greater delay than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals, which can reduce user's delay tolerance.

Control Delay (s/veh)	**LOS by Volume-to-Capacity Ratio[1]**	
	v/c ≤ 1.0	**v/c > 1.0**
0-10	A	F
> 10-15	B	F
> 15-25	C	F
> 25-35	D	F
> 35-50	E	F
> 50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

Appendix B – Existing Traffic Counts

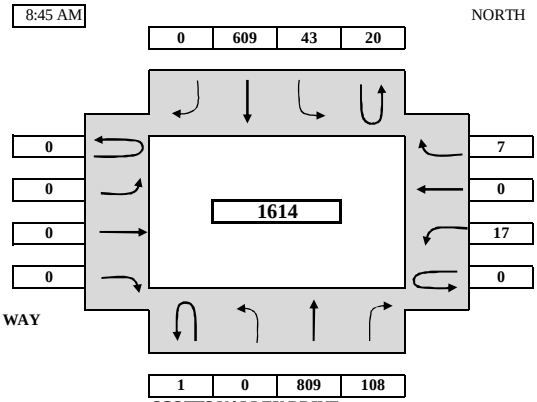
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

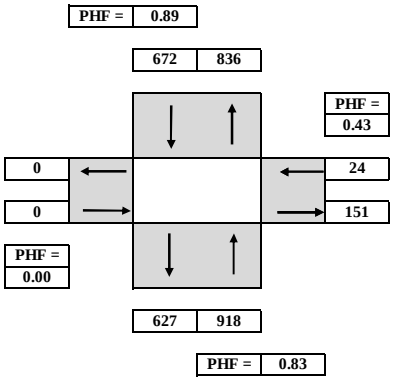
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**7:00 AM**	**TO**	**9:00 AM**
E-W APPROACH:	**CARBONERO WAY**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-1AM**

PEAK HOUR
7:45 AM to 8:45 AM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
7:00 AM	to	7:15 AM	0	0	94	29	5	7	67							18		2	**222**
7:15 AM	to	7:30 AM	0	0	286	52	12	15	118							21		4	**508**
7:30 AM	to	7:45 AM	0	0	438	75	17	22	248							30		6	**836**
7:45 AM	to	8:00 AM	0	0	654	98	26	32	398							34		7	**1249**
8:00 AM	to	8:15 AM	0	0	888	140	31	40	546							43		12	**1700**
8:15 AM	to	8:30 AM	1	0	1091	162	35	54	717							46		12	**2118**
8:30 AM	to	8:45 AM	1	0	1247	183	37	65	857							47		13	**2450**
8:45 AM	to	9:00 AM	1	0	1408	196	38	70	984							48		16	**2761**
TOTAL BY PERIOD																			
7:00 AM	to	7:15 AM	0	0	94	29	5	7	67	0	0	0	0	0	0	18	0	2	**222**
7:15 AM	to	7:30 AM	0	0	192	23	7	8	51	0	0	0	0	0	0	3	0	2	**286**
7:30 AM	to	7:45 AM	0	0	152	23	5	7	130	0	0	0	0	0	0	9	0	2	**328**
7:45 AM	to	8:00 AM	0	0	216	23	9	10	150	0	0	0	0	0	0	4	0	1	**413**
8:00 AM	to	8:15 AM	0	0	234	42	5	8	148	0	0	0	0	0	0	9	0	5	**451**
8:15 AM	to	8:30 AM	1	0	203	22	4	14	171	0	0	0	0	0	0	3	0	0	**418**
8:30 AM	to	8:45 AM	0	0	156	21	2	11	140	0	0	0	0	0	0	1	0	1	**332**
8:45 AM	to	9:00 AM	0	0	161	13	1	5	127	0	0	0	0	0	0	1	0	3	**311**
HOURLY TOTALS																			
7:00 AM	to	8:00 AM	0	0	654	98	26	32	398	0	0	0	0	0	0	34	0	7	**1249**
7:15 AM	to	8:15 AM	0	0	794	111	26	33	479	0	0	0	0	0	0	25	0	10	**1478**
7:30 AM	to	8:30 AM	1	0	805	110	23	39	599	0	0	0	0	0	0	25	0	8	**1610**
7:45 AM	to	8:45 AM	1	0	809	108	20	43	609	0	0	0	0	0	0	17	0	7	**1614**
8:00 AM	to	9:00 AM	1	0	754	98	12	38	586	0	0	0	0	0	0	14	0	9	**1512**

PEAK HOUR SUMMARY

7:45 AM to 8:45 AM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	1	0	809	108	20	43	609	0	0	0	0	0	0	17	0	7	**1614**
PHF BY MOVEMENT	0.25	0.00	0.86	0.64	0.56	0.77	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.35	OVERALL
PHF BY APPROACH	0.83				0.89				0.00				0.43				**0.89**
PED (Inc JAY-WALK)	2				0				0				0				**2**
BICYCLE	8				9				0				0				**17**

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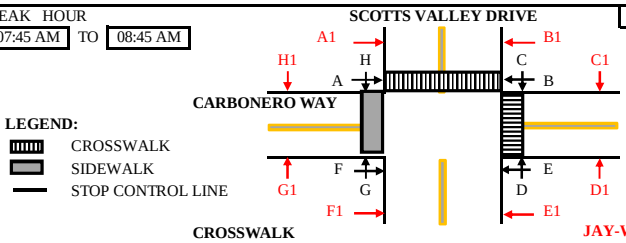
B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD:**	7:00 AM	to	9:00 AM
E-W APPROACH:	CARBONERO WAY	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-1AM

PEAK HOUR SUMMARY

PEAK HOUR 07:45 AM TO 08:45 AM



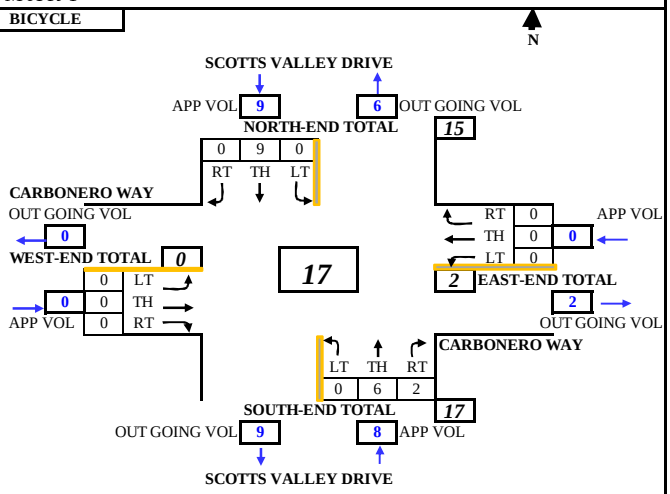
PEDESTRIAN | **BICYCLE**

CROSSWALK — **JAY-WALK (in RED)**

A	B	BY LEG N-END	BY DIR NB(D+G)	BY DIR NB(D1+G1)	BY LEG N-END	A1	B1
0	0	0	2	0	0	0	0
C	**D**	**E-END**	**SB(C+H)**	**SB(C1+H1)**	**E-END**	**C1**	**D1**
0	0	0	0	0	0	0	0
E	**F**	**S-END**	**EB(A+F)**	**EB(A1+F1)**	**S-END**	**E1**	**F1**
0	0	0	0	0	0	0	0
G	**H**	**W-END**	**WB(B+E)**	**WB(B1+E1)**	**W-END**	**G1**	**H1**
2	0	2	0	0	0	0	0

TOTAL PEDESTIAN 2 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Incldded JAY-WALK) 2



SURVEY DATA

TIME From	To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	BICYCLE NB SOUTH-END LT	NB TH	NB RT	SB NORTH-END LT	SB TH	SB RT	EB WEST-END LT	EB TH	EB RT	WB EAST-END LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
07:00 AM	07:15 AM	0	0	0	1	0	0	2	1		0	0	0	0	0	0	0	0		0	3	0	0	0	0	0	0	0	0	0	0		7
07:15 AM	07:30 AM	1	0	1	1	0	0	3	1		0	0	0	0	0	0	0	0		0	4	0	0	1	0	0	0	0	0	0	0		12
07:30 AM	07:45 AM	1	0	1	1	0	0	3	2		0	0	0	0	0	0	0	0		0	5	0	0	2	0	0	0	0	0	0	0		15
07:45 AM	08:00 AM	1	0	1	1	0	0	3	2		0	0	0	0	0	0	0	0		0	8	1	0	8	0	0	0	0	0	0	0		25
08:00 AM	08:15 AM	1	0	1	1	0	0	3	2		0	0	0	0	0	0	0	0		0	8	1	0	10	0	0	0	0	0	0	0		27
08:15 AM	08:30 AM	1	0	1	1	0	0	3	2		0	0	0	0	0	0	0	0		0	9	2	0	11	0	0	0	0	0	0	0		30
08:30 AM	08:45 AM	1	0	1	1	0	0	5	2		0	0	0	0	0	0	0	0		0	11	2	0	11	0	0	0	0	0	0	0		34
08:45 AM	09:00 AM	2	1	1	1	0	0	5	2		0	0	0	0	0	0	0	0		0	12	2	0	11	0	0	0	0	0	0	0		37

TOTAL BY PERIOD

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
07:00 AM	07:15 AM	0	0	0	1	0	0	2	1	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	7
07:15 AM	07:30 AM	1	0	1	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	5
07:30 AM	07:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	3
07:45 AM	08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	6	0	0	0	0	0	0	0	10	10
08:00 AM	08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	2
08:15 AM	08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3	3
08:30 AM	08:45 AM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	4
08:45 AM	09:00 AM	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3

HOURLY TOTALS

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
07:00 AM	08:00 AM	1	0	1	1	0	0	3	2	8	0	0	0	0	0	0	0	0	0	0	8	1	0	8	0	0	0	0	0	0	0	17	25
07:15 AM	08:15 AM	1	0	1	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	5	1	0	10	0	0	0	0	0	0	0	16	20
07:30 AM	08:30 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	2	0	10	0	0	0	0	0	0	0	17	18
07:45 AM	08:45 AM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	6	2	0	9	0	0	0	0	0	0	0	17	19
08:00 AM	09:00 AM	1	1	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	4	1	0	3	0	0	0	0	0	0	0	8	12

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
07:00 AM	08:00 AM	4	3	1	0	**8**	4	3	1	0	***8***	9	8	0	0	***17***
07:15 AM	08:15 AM	1	2	1	0	**4**	1	2	1	0	***4***	6	10	0	0	***16***
07:30 AM	08:30 AM	0	1	0	0	**1**	0	1	0	0	***1***	7	10	0	0	***17***
07:45 AM	08:45 AM	2	0	0	0	**2**	2	0	0	0	***2***	8	9	0	0	***17***
08:00 AM	09:00 AM	2	0	1	1	**4**	2	0	1	1	***4***	5	3	0	0	***8***

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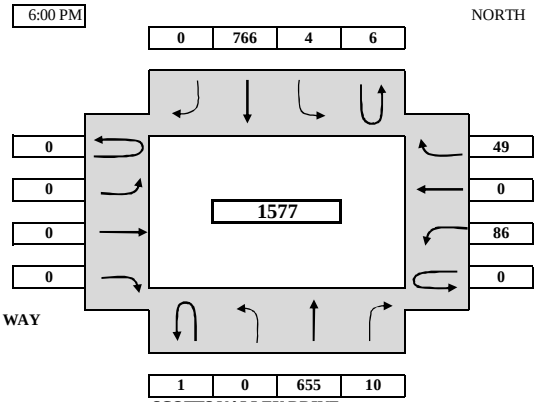
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

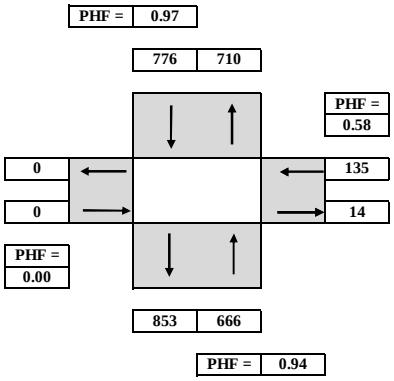
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**CARBONERO WAY**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-1PM**

PEAK HOUR
5:00 PM to 6:00 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From	PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																		
4:00 PM	4:15 PM	0	0	156	3	2	1	145							27		7	**341**
4:15 PM	4:30 PM	0	0	306	5	7	3	276							40		16	**653**
4:30 PM	4:45 PM	0	0	469	8	8	4	430							60		34	**1013**
4:45 PM	5:00 PM	0	0	602	9	11	5	592							89		51	**1359**
5:00 PM	5:15 PM	1	0	776	11	13	5	776							119		79	**1780**
5:15 PM	5:30 PM	1	0	944	13	15	6	970							136		89	**2174**
5:30 PM	5:45 PM	1	0	1094	17	17	9	1157							160		96	**2551**
5:45 PM	6:00 PM	1	0	1257	19	17	9	1358							175		100	**2936**
TOTAL BY PERIOD																		
4:00 PM	4:15 PM	0	0	156	3	2	1	145	0	0	0	0	0	0	27	0	7	**341**
4:15 PM	4:30 PM	0	0	150	2	5	2	131	0	0	0	0	0	0	13	0	9	**312**
4:30 PM	4:45 PM	0	0	163	3	1	1	154	0	0	0	0	0	0	20	0	18	**360**
4:45 PM	5:00 PM	0	0	133	1	3	1	162	0	0	0	0	0	0	29	0	17	**346**
5:00 PM	5:15 PM	1	0	174	2	2	0	184	0	0	0	0	0	0	30	0	28	**421**
5:15 PM	5:30 PM	0	0	168	2	2	1	194	0	0	0	0	0	0	17	0	10	**394**
5:30 PM	5:45 PM	0	0	150	4	2	3	187	0	0	0	0	0	0	24	0	7	**377**
5:45 PM	6:00 PM	0	0	163	2	0	0	201	0	0	0	0	0	0	15	0	4	**385**
HOURLY TOTALS																		
4:00 PM	5:00 PM	0	0	602	9	11	5	592	0	0	0	0	0	0	89	0	51	**1359**
4:15 PM	5:15 PM	1	0	620	8	11	4	631	0	0	0	0	0	0	92	0	72	**1439**
4:30 PM	5:30 PM	1	0	638	8	8	3	694	0	0	0	0	0	0	96	0	73	**1521**
4:45 PM	5:45 PM	1	0	625	9	9	5	727	0	0	0	0	0	0	100	0	62	**1538**
5:00 PM	6:00 PM	1	0	655	10	6	4	766	0	0	0	0	0	0	86	0	49	**1577**

PEAK HOUR SUMMARY

5:00 PM to 6:00 PM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	1	0	655	10	6	4	766	0	0	0	0	0	0	86	0	49	**1577**
PHF BY MOVEMENT	0.25	0.00	0.94	0.63	0.75	0.33	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.44	OVERALL
PHF BY APPROACH	0.94				0.97				0.00				0.58				**0.94**
PED (Inc JAY-WALK)	7				13				3				3				**26**
BICYCLE	8				8				0				0				**16**

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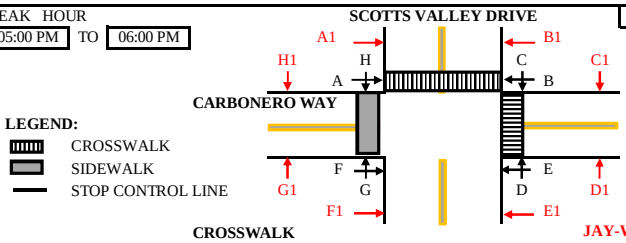
PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD:**	4:00 PM	to	6:00 PM
E-W APPROACH:	CARBONERO WAY	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-1PM

PEAK HOUR SUMMARY

PEAK HOUR 05:00 PM TO 06:00 PM



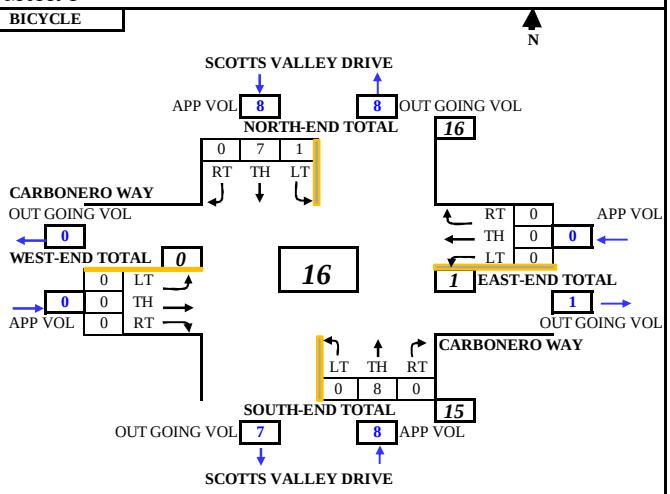
CROSSWALK — **JAY-WALK (in RED)**

A	B	BY LEG	BY DIR	BY DIR	BY LEG	A1	B1
3	3	N-END 6	NB(D+G) 7	NB(D1+G1) 0	N-END 0	0	0
C	D	E-END	SB(C+H)	SB(C1+H1)	E-END	C1	D1
8	4	12	13	0	0	0	0
E	F	S-END	EB(A+F)	EB(A1+F1)	S-END	E1	F1
0	0	0	3	0	0	0	0
G	H	W-END	WB(B+E)	WB(B1+E1)	W-END	G1	H1
3	5	8	3	0	0	0	0

TOTAL PEDESTIAN 26 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Incldded JAY-WALK) 26

PEDESTRIAN | **BICYCLE**



SURVEY DATA

TIME From	To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	B	E-END C	D	S-END E	F	W-END G	H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	B1	E-END C1	D1	S-END E1	F1	W-END G1	H1	TOTAL	BICYCLE NB SOUTH-END LT	TH	RT	SB NORTH-END LT	TH	RT	EB WEST-END LT	TH	RT	WB EAST-END LT	TH	RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	4	2	0	0	0	2	7		0	0	0	0	0	0	0	0		0	3	0	0	2	0	0	0	0	0	0	0			20
04:15 PM	04:30 PM	0	5	2	0	0	0	2	7		0	0	0	0	0	0	0	0		0	5	0	0	9	0	0	0	0	1	0	0			31
04:30 PM	04:45 PM	1	7	2	2	0	0	2	8		0	0	0	0	0	0	0	0		0	7	0	1	10	0	0	0	0	2	0	0			41
04:45 PM	05:00 PM	2	7	4	3	0	0	3	8		0	0	0	0	0	0	0	0		0	7	0	2	12	0	0	0	0	2	0	0			50
05:00 PM	05:15 PM	4	7	7	5	0	0	6	8		0	0	0	0	0	0	0	0		0	10	0	2	16	0	0	0	0	2	0	0			67
05:15 PM	05:30 PM	4	7	9	5	0	0	6	9		0	0	0	0	0	0	0	0		0	12	0	2	17	0	0	0	0	2	0	0			73
05:30 PM	05:45 PM	4	9	10	6	0	0	6	11		0	0	0	0	0	0	0	0		0	13	0	3	19	0	0	0	0	2	0	0			83
05:45 PM	06:00 PM	5	10	12	7	0	0	6	13		0	0	0	0	0	0	0	0		0	15	0	3	19	0	0	0	0	2	0	0			92
TOTAL BY PERIOD																																		
04:00 PM	04:15 PM	0	4	2	0	0	0	2	7	15	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	5		20
04:15 PM	04:30 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	7	0	0	0	0	1	0	0	10		11
04:30 PM	04:45 PM	1	2	0	2	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	4		10
04:45 PM	05:00 PM	1	0	2	1	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	4		9
05:00 PM	05:15 PM	2	0	3	2	0	0	3	0	10	0	0	0	0	0	0	0	0	0	0	3	0	0	4	0	0	0	0	0	0	0	7		17
05:15 PM	05:30 PM	0	0	2	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3		6
05:30 PM	05:45 PM	0	2	1	1	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	4		10
05:45 PM	06:00 PM	1	1	2	1	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2		9
HOURLY TOTALS																																		
04:00 PM	05:00 PM	2	7	4	3	0	0	3	8	27	0	0	0	0	0	0	0	0	0	0	7	0	2	12	0	0	0	0	2	0	0	23		50
04:15 PM	05:15 PM	4	3	5	5	0	0	4	1	22	0	0	0	0	0	0	0	0	0	0	7	0	2	14	0	0	0	0	2	0	0	25		47
04:30 PM	05:30 PM	4	2	7	5	0	0	4	2	24	0	0	0	0	0	0	0	0	0	0	7	0	2	8	0	0	0	0	1	0	0	18		42
04:45 PM	05:45 PM	3	2	8	4	0	0	4	3	24	0	0	0	0	0	0	0	0	0	0	6	0	2	9	0	0	0	0	1	0	0	18		42
05:00 PM	06:00 PM	3	3	8	4	0	0	3	5	26	0	0	0	0	0	0	0	0	0	0	8	0	1	7	0	0	0	0	0	0	0	16		42

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
04:00 PM	05:00 PM	6	12	2	7	27	6	12	2	7	27	7	14	0	2	23
04:15 PM	05:15 PM	9	6	4	3	22	9	6	4	3	22	7	16	0	2	25
04:30 PM	05:30 PM	9	9	4	2	24	9	9	4	2	24	7	10	0	1	18
04:45 PM	05:45 PM	8	11	3	2	24	8	11	3	2	24	6	11	0	1	18
05:00 PM	06:00 PM	7	13	3	3	26	7	13	3	3	26	8	8	0	0	16

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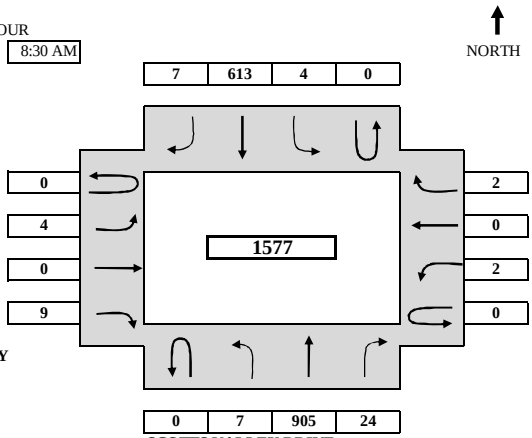
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

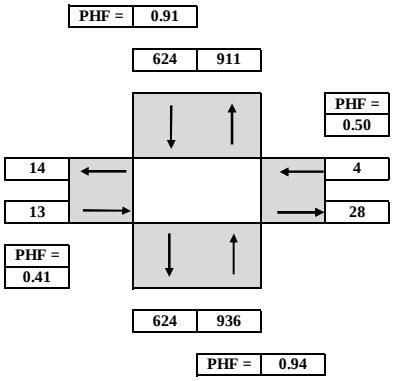
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**7:00 AM**	**TO**	**9:00 AM**
E-W APPROACH:	**DUNSLEE WAY**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-2AM**

PEAK HOUR

7:30 AM to 8:30 AM



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
7:00 AM	to	7:15 AM		0	93	4		1	72	1		0	0	1		0	0	0	**172**
7:15 AM	to	7:30 AM		0	185	12		2	132	1		0	0	3		0	0	0	**335**
7:30 AM	to	7:45 AM		1	420	22		4	250	2		0	0	3		0	0	0	**702**
7:45 AM	to	8:00 AM		3	643	30		6	418	3		2	0	6		0	0	0	**1111**
8:00 AM	to	8:15 AM		5	886	33		6	581	6		2	0	6		1	0	1	**1527**
8:15 AM	to	8:30 AM		7	1090	36		6	745	8		4	0	12		2	0	2	**1912**
8:30 AM	to	8:45 AM		9	1233	37		6	893	9		7	0	14		2	0	2	**2212**
8:45 AM	to	9:00 AM		10	1412	39		7	1035	9		7	0	15		2	0	2	**2538**
TOTAL BY PERIOD																			
7:00 AM	to	7:15 AM	0	0	93	4	0	1	72	1	0	0	0	1	0	0	0	0	**172**
7:15 AM	to	7:30 AM	0	0	92	8	0	1	60	0	0	0	0	2	0	0	0	0	**163**
7:30 AM	to	7:45 AM	0	1	235	10	0	2	118	1	0	0	0	0	0	0	0	0	**367**
7:45 AM	to	8:00 AM	0	2	223	8	0	2	168	1	0	2	0	3	0	0	0	0	**409**
8:00 AM	to	8:15 AM	0	2	243	3	0	0	163	3	0	0	0	0	0	1	0	1	**416**
8:15 AM	to	8:30 AM	0	2	204	3	0	0	164	2	0	2	0	6	0	1	0	1	**385**
8:30 AM	to	8:45 AM	0	2	143	1	0	0	148	1	0	3	0	2	0	0	0	0	**300**
8:45 AM	to	9:00 AM	0	1	179	2	0	1	142	0	0	0	0	1	0	0	0	0	**326**
HOURLY TOTALS																			
7:00 AM	to	8:00 AM	0	3	643	30	0	6	418	3	0	2	0	6	0	0	0	0	**1111**
7:15 AM	to	8:15 AM	0	5	793	29	0	5	509	5	0	2	0	5	0	1	0	1	**1355**
7:30 AM	to	8:30 AM	0	7	905	24	0	4	613	7	0	4	0	9	0	2	0	2	**1577**
7:45 AM	to	8:45 AM	0	8	813	15	0	2	643	7	0	7	0	11	0	2	0	2	**1510**
8:00 AM	to	9:00 AM	0	7	769	9	0	1	617	6	0	5	0	9	0	2	0	2	**1427**

PEAK HOUR SUMMARY

7:30 AM to 8:30 AM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	7	905	24	0	4	613	7	0	4	0	9	0	2	0	2	**1577**
PHF BY MOVEMENT	0.00	0.88	0.93	0.60	0.00	0.50	0.91	0.58	0.00	0.50	0.00	0.38	0.00	0.50	0.00	0.50	OVERALL
PHF BY APPROACH	0.94				0.91				0.41				0.50				**0.95**
PED (Inc JAY-WALK)	3				2				0				0				**5**
BICYCLE	4				8				0				0				**12**

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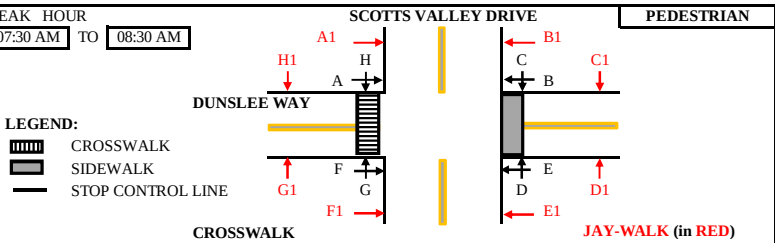
B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD:**	7:00 AM	to	9:00 AM
E-W APPROACH:	DUNSLEE WAY	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-2AM

PEAK HOUR SUMMARY

PEAK HOUR 07:30 AM TO 08:30 AM



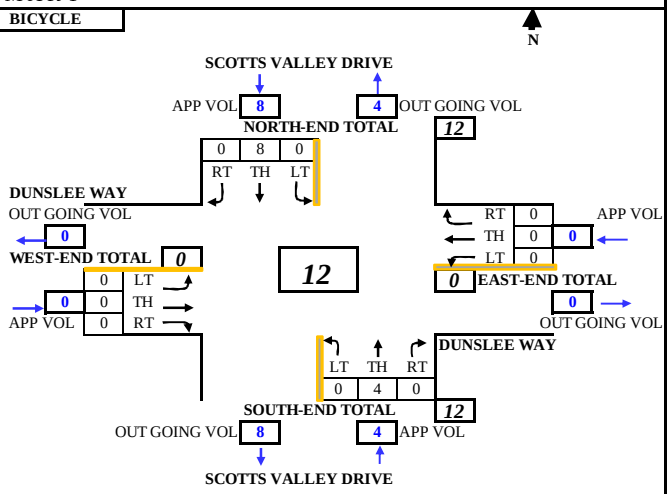
CROSSWALK — **JAY-WALK (in RED)**

		BY LEG	BY DIR	BY DIR	BY LEG		
A	B	N-END	NB(D+G)	NB(D1+G1)	N-END	A1	B1
0	0	0	3	0	0	0	0
C	D	E-END	SB(C+H)	SB(C1+H1)	E-END	C1	D1
0	1	1	2	0	0	0	0
E	F	S-END	EB(A+F)	EB(A1+F1)	S-END	E1	F1
0	0	0	0	0	0	0	0
G	H	W-END	WB(B+E)	WB(B1+E1)	W-END	G1	H1
2	2	4	0	0	0	0	0

TOTAL PEDESTIAN 5 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Incldded JAY-WALK) 5

PEDESTRIAN | **BICYCLE**



SURVEY DATA

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK N-END A1	JAY-WALK N-END B1	JAY-WALK E-END C1	JAY-WALK E-END D1	JAY-WALK S-END E1	JAY-WALK S-END F1	JAY-WALK W-END G1	JAY-WALK W-END H1	JAY-WALK TOTAL	NB SOUTH-END LT	NB SOUTH-END TH	NB SOUTH-END RT	SB NORTH-END LT	SB NORTH-END TH	SB NORTH-END RT	EB WEST-END LT	EB WEST-END TH	EB WEST-END RT	WB EAST-END LT	WB EAST-END TH	WB EAST-END RT	TOTAL	OVER ALL TOTAL
07:00 AM	07:15 AM	0	0	0	1	0	0	2	0		0	0	0	0	0	0	0	0		0	2	0	0	0	0	0	0	0	0	0	0		5
07:15 AM	07:30 AM	0	0	1	1	0	0	4	1		0	0	0	0	0	0	0	0		0	2	0	0	0	0	0	0	0	0	0	0		9
07:30 AM	07:45 AM	0	0	1	1	0	0	4	2		0	0	0	0	0	0	0	0		0	3	0	0	0	0	0	0	0	0	0	0		11
07:45 AM	08:00 AM	0	0	1	2	0	0	5	3		0	0	0	0	0	0	0	0		0	5	0	0	5	0	0	0	0	0	0	0		21
08:00 AM	08:15 AM	0	0	1	2	0	0	6	3		0	0	0	0	0	0	0	0		0	5	0	0	7	0	0	0	0	0	0	0		24
08:15 AM	08:30 AM	0	0	1	2	0	0	6	3		0	0	0	0	0	0	0	0		0	6	0	0	8	0	0	0	0	0	0	0		26
08:30 AM	08:45 AM	0	0	1	2	0	0	7	3		0	0	0	0	0	0	0	0		0	8	0	0	8	0	0	0	0	0	0	0		29
08:45 AM	09:00 AM	0	0	1	5	0	0	8	4		0	0	0	0	0	0	0	0		0	9	0	0	8	0	0	0	0	0	0	0		35

TOTAL BY PERIOD

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK N-END A1	JAY-WALK N-END B1	JAY-WALK E-END C1	JAY-WALK E-END D1	JAY-WALK S-END E1	JAY-WALK S-END F1	JAY-WALK W-END G1	JAY-WALK W-END H1	JAY-WALK TOTAL	NB SOUTH-END LT	NB SOUTH-END TH	NB SOUTH-END RT	SB NORTH-END LT	SB NORTH-END TH	SB NORTH-END RT	EB WEST-END LT	EB WEST-END TH	EB WEST-END RT	WB EAST-END LT	WB EAST-END TH	WB EAST-END RT	TOTAL	OVER ALL TOTAL
07:00 AM	07:15 AM	0	0	0	1	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	5
07:15 AM	07:30 AM	0	0	1	0	0	0	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
07:30 AM	07:45 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
07:45 AM	08:00 AM	0	0	0	1	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	7	10
08:00 AM	08:15 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	3
08:15 AM	08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
08:30 AM	08:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	3
08:45 AM	09:00 AM	0	0	0	3	0	0	1	1	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	6

HOURLY TOTALS

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK N-END A1	JAY-WALK N-END B1	JAY-WALK E-END C1	JAY-WALK E-END D1	JAY-WALK S-END E1	JAY-WALK S-END F1	JAY-WALK W-END G1	JAY-WALK W-END H1	JAY-WALK TOTAL	NB SOUTH-END LT	NB SOUTH-END TH	NB SOUTH-END RT	SB NORTH-END LT	SB NORTH-END TH	SB NORTH-END RT	EB WEST-END LT	EB WEST-END TH	EB WEST-END RT	WB EAST-END LT	WB EAST-END TH	WB EAST-END RT	TOTAL	OVER ALL TOTAL
07:00 AM	08:00 AM	0	0	1	2	0	0	5	3	11	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	10	21
07:15 AM	08:15 AM	0	0	1	1	0	0	4	3	9	0	0	0	0	0	0	0	0	0	0	3	0	0	7	0	0	0	0	0	0	0	10	19
07:30 AM	08:30 AM	0	0	0	1	0	0	2	2	5	0	0	0	0	0	0	0	0	0	0	4	0	0	8	0	0	0	0	0	0	0	12	17
07:45 AM	08:45 AM	0	0	0	1	0	0	3	1	5	0	0	0	0	0	0	0	0	0	0	5	0	0	8	0	0	0	0	0	0	0	13	18
08:00 AM	09:00 AM	0	0	0	3	0	0	3	1	7	0	0	0	0	0	0	0	0	0	0	4	0	0	3	0	0	0	0	0	0	0	7	14

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
07:00 AM	08:00 AM	7	4	0	0	11	7	4	0	0	11	5	5	0	0	10
07:15 AM	08:15 AM	5	4	0	0	9	5	4	0	0	9	3	7	0	0	10
07:30 AM	08:30 AM	3	2	0	0	5	3	2	0	0	5	4	8	0	0	12
07:45 AM	08:45 AM	4	1	0	0	5	4	1	0	0	5	5	8	0	0	13
08:00 AM	09:00 AM	6	1	0	0	7	6	1	0	0	7	4	3	0	0	7

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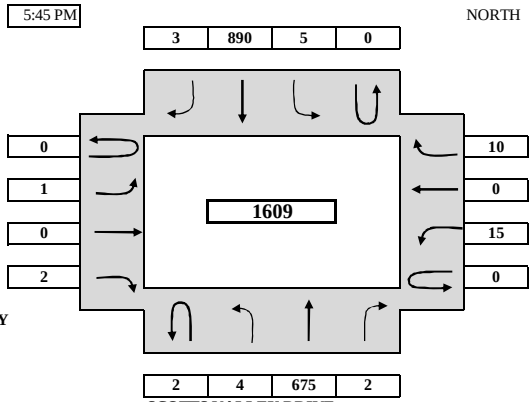
INTERSECTION TURNING MOVEMENT SUMMARY

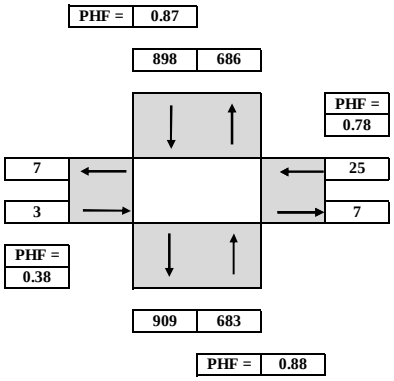
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**DUNSLEE WAY**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-2PM**

PEAK HOUR
4:45 PM to 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
4:00 PM	to	4:15 PM	0	3	170	0		1	172	1		0	0	2		2	0	6	**357**
4:15 PM	to	4:30 PM	0	3	326	3		3	332	2		0	0	4		5	0	10	**688**
4:30 PM	to	4:45 PM	0	4	500	5		3	508	2		0	0	4		12	0	11	**1049**
4:45 PM	to	5:00 PM	1	5	655	5		7	685	3		0	0	5		13	0	18	**1397**
5:00 PM	to	5:15 PM	1	6	845	7		7	922	3		0	0	5		18	0	20	**1834**
5:15 PM	to	5:30 PM	2	8	1017	7		7	1178	4		1	0	6		24	0	20	**2274**
5:30 PM	to	5:45 PM	2	8	1175	7		8	1398	5		1	0	6		27	0	21	**2658**
5:45 PM	to	6:00 PM	2	8	1312	8		8	1592	5		1	0	7		27	0	22	**2992**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	3	170	0	0	1	172	1	0	0	0	2	0	2	0	6	**357**
4:15 PM	to	4:30 PM	0	0	156	3	0	2	160	1	0	0	0	2	0	3	0	4	**331**
4:30 PM	to	4:45 PM	0	1	174	2	0	0	176	0	0	0	0	0	0	7	0	1	**361**
4:45 PM	to	5:00 PM	1	1	155	0	0	4	177	1	0	0	0	1	0	1	0	7	**348**
5:00 PM	to	5:15 PM	0	1	190	2	0	0	237	0	0	0	0	0	0	5	0	2	**437**
5:15 PM	to	5:30 PM	1	2	172	0	0	0	256	1	0	1	0	1	0	6	0	0	**440**
5:30 PM	to	5:45 PM	0	0	158	0	0	1	220	1	0	0	0	0	0	3	0	1	**384**
5:45 PM	to	6:00 PM	0	0	137	1	0	0	194	0	0	0	0	1	0	0	0	1	**334**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	1	5	655	5	0	7	685	3	0	0	0	5	0	13	0	18	**1397**
4:15 PM	to	5:15 PM	1	3	675	7	0	6	750	2	0	0	0	3	0	16	0	14	**1477**
4:30 PM	to	5:30 PM	2	5	691	4	0	4	846	2	0	1	0	2	0	19	0	10	**1586**
4:45 PM	to	5:45 PM	2	4	675	2	0	5	890	3	0	1	0	2	0	15	0	10	**1609**
5:00 PM	to	6:00 PM	1	3	657	3	0	1	907	2	0	1	0	2	0	14	0	4	**1595**

PEAK HOUR SUMMARY

4:45 PM to 5:45 PM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	2	4	675	2	0	5	890	3	0	1	0	2	0	15	0	10	**1609**
PHF BY MOVEMENT	0.50	0.50	0.89	0.25	0.00	0.31	0.87	0.75	0.00	0.25	0.00	0.50	0.00	0.63	0.00	0.36	OVERALL
PHF BY APPROACH	0.88				0.87				0.38				0.78				**0.91**
PED (Inc JAY-WALK)	10				12				0				0				**22**
BICYCLE	5				8				1				0				**14**

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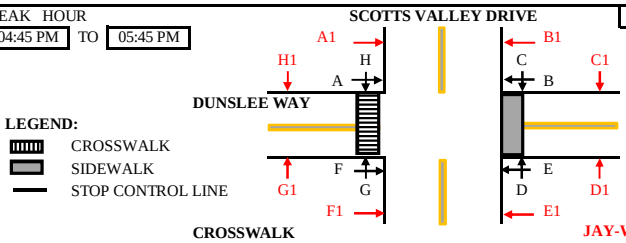
PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD:**	4:00 PM	to	6:00 PM
E-W APPROACH:	DUNSLEE WAY	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-2PM

PEAK HOUR SUMMARY

PEAK HOUR 04:45 PM TO 05:45 PM

PEDESTRIAN | **BICYCLE**

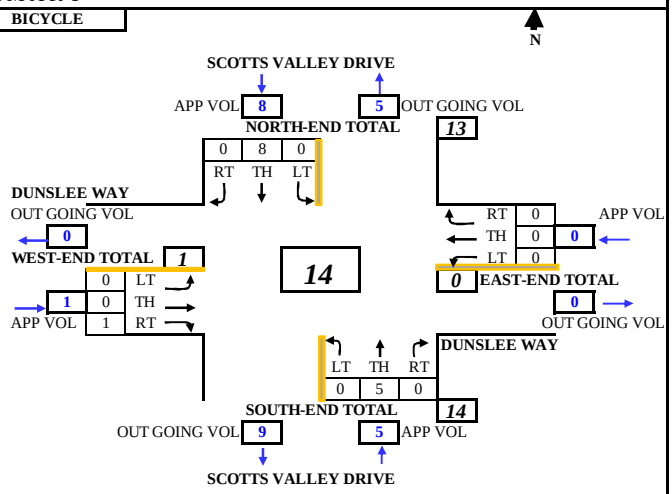


CROSSWALK | **JAY-WALK (in RED)**

		BY LEG	BY DIR	BY DIR	BY LEG		
A	B	N-END	NB(D+G)	NB(D1+G1)	N-END	A1	B1
0	0	0	10	0	0	0	0
C	D	E-END	SB(C+H)	SB(C1+H1)	E-END	C1	D1
9	6	15	12	0	0	0	0
E	F	S-END	EB(A+F)	EB(A1+F1)	S-END	E1	F1
0	0	0	0	0	0	0	0
G	H	W-END	WB(B+E)	WB(B1+E1)	W-END	G1	H1
4	3	7	0	0	0	0	0

TOTAL PEDESTIAN 22 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Incldded JAY-WALK) 22



SURVEY DATA

TIME From	To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	BICYCLE NB SOUTH-END LT	NB TH	NB RT	SB NORTH-END LT	SB TH	SB RT	EB WEST-END LT	EB TH	EB RT	WB EAST-END LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	0	1	0	0	0	2	2		0	0	0	0	0	0	0	0		0	2	0	0	2	0	0	0	0	0	0	0			9
04:15 PM	04:30 PM	0	0	1	0	0	0	4	2		0	0	0	0	0	0	0	0		0	2	0	0	8	0	0	0	0	0	0	0			17
04:30 PM	04:45 PM	0	0	1	3	0	0	4	2		0	0	0	0	0	0	0	0		0	4	0	0	10	0	0	0	0	0	0	0			24
04:45 PM	05:00 PM	0	0	3	4	0	0	4	4		0	0	0	0	0	0	0	0		0	4	0	0	12	0	0	0	1	0	0	0			32
05:00 PM	05:15 PM	0	0	8	8	0	0	4	4		0	0	0	0	0	0	0	0		0	7	0	0	15	0	0	0	1	0	0	0			47
05:15 PM	05:30 PM	0	0	8	8	0	0	7	4		0	0	0	0	0	0	0	0		0	8	0	0	16	0	0	0	1	0	0	0			52
05:30 PM	05:45 PM	0	0	10	9	0	0	8	5		0	0	0	0	0	0	0	0		0	9	0	0	18	0	0	0	1	0	0	0			60
05:45 PM	06:00 PM	0	0	12	10	0	0	8	8		0	0	0	0	0	0	0	0		0	11	0	0	18	0	0	0	1	0	0	0			68

TOTAL BY PERIOD

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	0	1	0	0	0	2	2	5	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4	9
04:15 PM	04:30 PM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	8
04:30 PM	04:45 PM	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4	7
04:45 PM	05:00 PM	0	0	2	1	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	8
05:00 PM	05:15 PM	0	0	5	4	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	6	15
05:15 PM	05:30 PM	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	5
05:30 PM	05:45 PM	0	0	2	1	0	0	1	1	5	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	3	8
05:45 PM	06:00 PM	0	0	2	1	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	8

HOURLY TOTALS

TIME From	To	N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	05:00 PM	0	0	3	4	0	0	4	4	15	0	0	0	0	0	0	0	0	0	0	4	0	0	12	0	0	0	1	0	0	0	17	32
04:15 PM	05:15 PM	0	0	7	8	0	0	2	2	19	0	0	0	0	0	0	0	0	0	0	5	0	0	13	0	0	0	1	0	0	0	19	38
04:30 PM	05:30 PM	0	0	7	8	0	0	3	2	20	0	0	0	0	0	0	0	0	0	0	6	0	0	8	0	0	0	1	0	0	0	15	35
04:45 PM	05:45 PM	0	0	9	6	0	0	4	3	22	0	0	0	0	0	0	0	0	0	0	5	0	0	8	0	0	0	1	0	0	0	14	36
05:00 PM	06:00 PM	0	0	9	6	0	0	4	4	23	0	0	0	0	0	0	0	0	0	0	7	0	0	6	0	0	0	0	0	0	0	13	36

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
04:00 PM	05:00 PM	8	7	0	0	15	8	7	0	0	15	4	12	1	0	17
04:15 PM	05:15 PM	10	9	0	0	19	10	9	0	0	19	5	13	1	0	19
04:30 PM	05:30 PM	11	9	0	0	20	11	9	0	0	20	6	8	1	0	15
04:45 PM	05:45 PM	10	12	0	0	22	10	12	0	0	22	5	8	1	0	14
05:00 PM	06:00 PM	10	13	0	0	23	10	13	0	0	23	7	6	0	0	13

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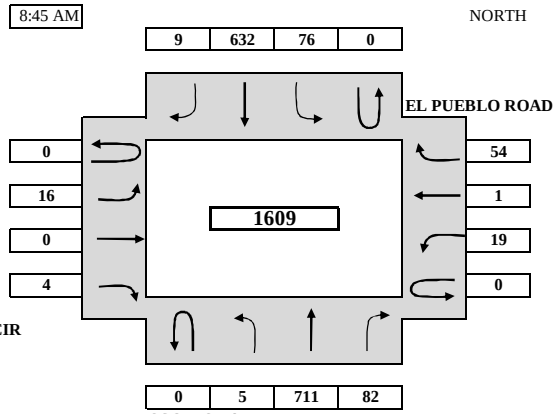
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

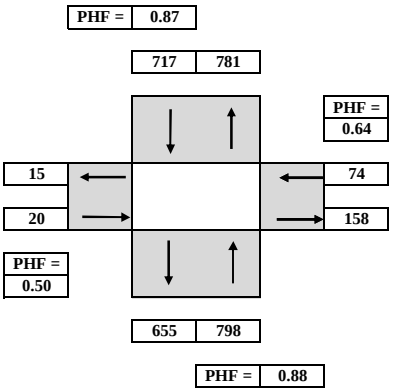
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**7:00 AM**	**TO**	**9:00 AM**
E-W APPROACH:	**FRAPWELL CIR - EL PUEBLO ROAD**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-3AM**

PEAK HOUR
7:45 AM to 8:45 AM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME PERIOD From	To	NORTHBOUND U-TURN	LEFT	THRU	RIGHT	SOUTHBOUND U-TURN	LEFT	THRU	RIGHT	EASTBOUND U-TURN	LEFT	THRU	RIGHT	WESTBOUND U-TURN	LEFT	THRU	RIGHT	TOTAL
SURVEY DATA																		
7:00 AM	7:15 AM		0	60	20		7	68	1		5	0	0		4	0	10	**175**
7:15 AM	7:30 AM		0	230	42		21	144	4		7	0	1		5	0	14	**468**
7:30 AM	7:45 AM		0	356	57		34	253	6		9	0	1		15	0	22	**753**
7:45 AM	8:00 AM		0	570	70		60	433	6		17	0	3		19	0	47	**1225**
8:00 AM	8:15 AM		3	755	93		76	572	12		21	0	3		20	0	54	**1609**
8:15 AM	8:30 AM		5	935	121		95	745	14		22	0	4		26	0	65	**2032**
8:30 AM	8:45 AM		5	1067	139		110	885	15		25	0	5		34	1	76	**2362**
8:45 AM	9:00 AM		6	1192	161		125	999	15		25	0	6		42	1	86	**2658**
TOTAL BY PERIOD																		
7:00 AM	7:15 AM	0	0	60	20	0	7	68	1	0	5	0	0	0	4	0	10	**175**
7:15 AM	7:30 AM	0	0	170	22	0	14	76	3	0	2	0	1	0	1	0	4	**293**
7:30 AM	7:45 AM	0	0	126	15	0	13	109	2	0	2	0	0	0	10	0	8	**285**
7:45 AM	8:00 AM	0	0	214	13	0	26	180	0	0	8	0	2	0	4	0	25	**472**
8:00 AM	8:15 AM	0	3	185	23	0	16	139	6	0	4	0	0	0	1	0	7	**384**
8:15 AM	8:30 AM	0	2	180	28	0	19	173	2	0	1	0	1	0	6	0	11	**423**
8:30 AM	8:45 AM	0	0	132	18	0	15	140	1	0	3	0	1	0	8	1	11	**330**
8:45 AM	9:00 AM	0	1	125	22	0	15	114	0	0	0	0	1	0	8	0	10	**296**
HOURLY TOTALS																		
7:00 AM	8:00 AM	0	0	570	70	0	60	433	6	0	17	0	3	0	19	0	47	**1225**
7:15 AM	8:15 AM	0	3	695	73	0	69	504	11	0	16	0	3	0	16	0	44	**1434**
7:30 AM	8:30 AM	0	5	705	79	0	74	601	10	0	15	0	3	0	21	0	51	**1564**
7:45 AM	8:45 AM	0	5	711	82	0	76	632	9	0	16	0	4	0	19	1	54	**1609**
8:00 AM	9:00 AM	0	6	622	91	0	65	566	9	0	8	0	3	0	23	1	39	**1433**

PEAK HOUR SUMMARY

7:45 AM to 8:45 AM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	5	711	82	0	76	632	9	0	16	0	4	0	19	1	54	**1609**
PHF BY MOVEMENT	0.00	0.42	0.83	0.73	0.00	0.73	0.88	0.38	0.00	0.50	0.00	0.50	0.00	0.59	0.25	0.54	OVERALL
PHF BY APPROACH	0.88				0.87				0.50				0.64				**0.85**
PED (Inc JAY-WALK)	1				0				2				1				**4**
BICYCLE	4				4				0				0				**8**

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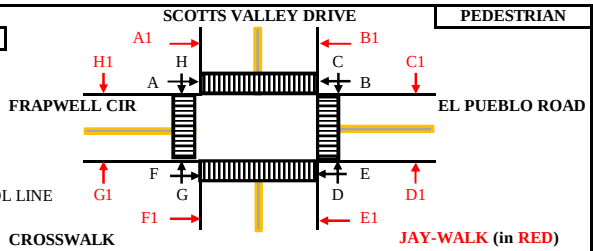
PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD**	7:00 AM	to	9:00 AM
E-W APPROACH:	FRAPWELL CIR - EL PUEBLO ROAD	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-3AM

PEAK HOUR SUMMARY

PEAK HOUR 07:45 AM TO 08:45 AM



LEGEND:
- CROSSWALK
- SIDEWALK
- STOP CONTROL LINE

CROSSWALK

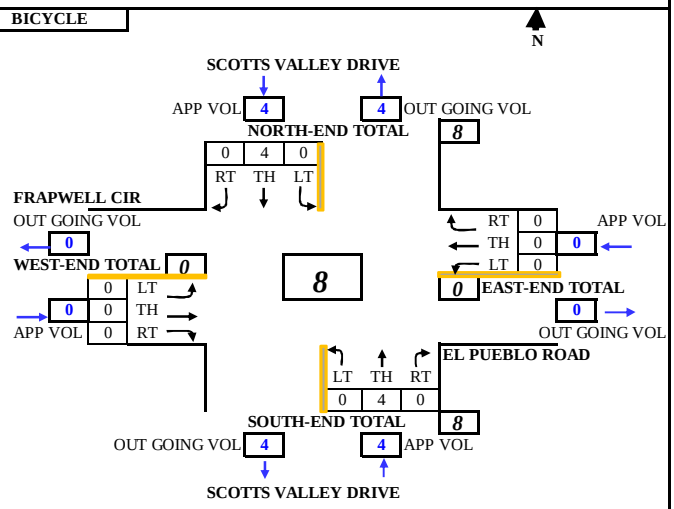
A	B	BY LEG N-END	BY DIR NB(D+G)	BY DIR NB(D1+G1)	BY LEG N-END	A1	B1
1	1	2	1	0	0	0	0
C	D	E-END	SB(C+H)	SB(C1+H1)	E-END	C1	D1
0	0	0	0	0	0	0	0
E	F	S-END	EB(A+F)	EB(A1+F1)	S-END	E1	F1
0	1	1	2	0	0	0	0
G	H	W-END	WB(B+E)	WB(B1+E1)	W-END	G1	H1
1	0	1	1	0	0	0	0

JAY-WALK (in RED)

TOTAL PEDESTIAN 4 **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Inclded JAY-WALK) 4

PEDESTRIAN | **BICYCLE**



TIME From	TIME To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	B	E-END C	D	S-END E	F	W-END G	H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	B1	E-END C1	D1	S-END E1	F1	W-END G1	H1	TOTAL	BICYCLE NB SOUTH-END LT	TH	RT	SB NORTH-END LT	TH	RT	EB WEST-END LT	TH	RT	WB EAST-END LT	TH	RT	TOTAL	OVER ALL TOTAL
SURVEY DATA																																	
07:00 AM	07:15 AM	1	0	1	0	1	0	1	0		0	0	0	0	0	0	0	0		0	3	0	0	0	0	0	0	0	0	0	0	0	7
07:15 AM	07:30 AM	2	0	2	0	1	3	4	1		0	0	0	0	0	0	0	0		0	3	0	0	0	0	0	0	0	0	0	0	0	16
07:30 AM	07:45 AM	2	0	2	0	1	3	4	1		0	0	0	0	0	0	0	0		0	4	0	0	0	0	0	0	0	0	0	0	0	17
07:45 AM	08:00 AM	2	1	2	0	1	4	4	1		0	0	0	0	0	0	0	0		0	5	0	0	2	0	0	0	0	0	0	0	0	22
08:00 AM	08:15 AM	2	1	2	0	1	4	4	1		0	0	0	0	0	0	0	0		0	5	0	0	3	0	0	0	0	0	0	0	0	23
08:15 AM	08:30 AM	2	1	2	0	1	4	4	1		0	0	0	0	0	0	0	0		0	6	0	0	4	0	0	0	0	0	0	0	0	25
08:30 AM	08:45 AM	3	1	2	0	1	4	5	1		0	0	0	0	0	0	0	0		0	8	0	0	4	0	0	0	0	0	0	0	0	29
08:45 AM	09:00 AM	4	1	2	1	1	4	6	1		0	0	0	0	0	0	0	0		0	9	0	0	4	0	0	0	0	0	0	0	0	33
TOTAL BY PERIOD																																	
07:00 AM	07:15 AM	1	0	1	0	1	0	1	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	7
07:15 AM	07:30 AM	1	0	1	0	0	3	3	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
07:30 AM	07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	08:00 AM	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	3	5
08:00 AM	08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
08:15 AM	08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	2
08:30 AM	08:45 AM	1	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	4
08:45 AM	09:00 AM	1	0	0	1	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4
HOURLY TOTALS																																	
07:00 AM	08:00 AM	2	1	2	0	1	4	4	1	15	0	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	0	0	0	0	7	22
07:15 AM	08:15 AM	1	1	1	0	0	4	3	1	11	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	5	16
07:30 AM	08:30 AM	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	4	0	0	0	0	0	0	0	7	9
07:45 AM	08:45 AM	1	1	0	0	0	1	1	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	8	12
08:00 AM	09:00 AM	2	0	0	1	0	0	2	0	5	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	0	0	6	11

SUMMARY (HOURLY COUNT)

TIME From	TIME To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
07:00 AM	08:00 AM	4	3	6	2	15	4	3	6	2	15	5	2	0	0	7
07:15 AM	08:15 AM	3	2	5	1	11	3	2	5	1	11	2	3	0	0	5
07:30 AM	08:30 AM	0	0	1	1	2	0	0	1	1	2	3	4	0	0	7
07:45 AM	08:45 AM	1	0	2	1	4	1	0	2	1	4	4	4	0	0	8
08:00 AM	09:00 AM	3	0	2	0	5	3	0	2	0	5	4	2	0	0	6

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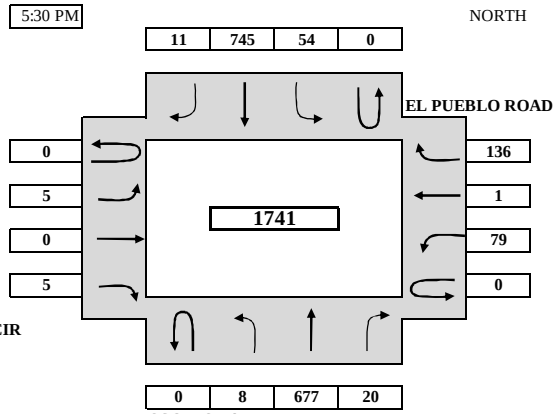
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

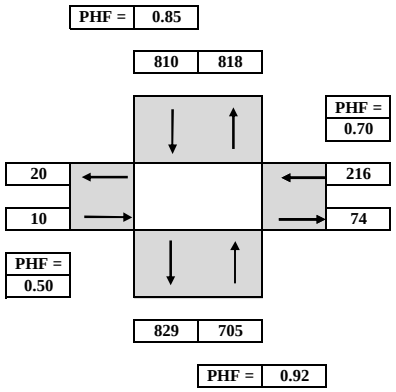
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**FRAPWELL CIR - EL PUEBLO ROAD**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-3PM**

PEAK HOUR
4:30 PM to 5:30 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
4:00 PM	to	4:15 PM		1	162	15		20	154	2		1	0	1		20	0	40	**416**
4:15 PM	to	4:30 PM		4	307	29		34	293	5		1	0	1		39	0	58	**771**
4:30 PM	to	4:45 PM		7	468	39		54	431	9		2	0	2		67	0	107	**1186**
4:45 PM	to	5:00 PM		8	626	44		71	599	14		3	0	2		75	0	147	**1589**
5:00 PM	to	5:15 PM		8	815	47		80	827	16		3	0	4		100	0	179	**2079**
5:15 PM	to	5:30 PM		12	984	49		88	1038	16		6	0	6		118	1	194	**2512**
5:30 PM	to	5:45 PM		12	1133	55		95	1254	17		6	0	7		134	1	207	**2921**
5:45 PM	to	6:00 PM		14	1267	60		101	1435	19		8	0	7		143	1	216	**3271**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	1	162	15	0	20	154	2	0	1	0	1	0	20	0	40	**416**
4:15 PM	to	4:30 PM	0	3	145	14	0	14	139	3	0	0	0	0	0	19	0	18	**355**
4:30 PM	to	4:45 PM	0	3	161	10	0	20	138	4	0	1	0	1	0	28	0	49	**415**
4:45 PM	to	5:00 PM	0	1	158	5	0	17	168	5	0	1	0	0	0	8	0	40	**403**
5:00 PM	to	5:15 PM	0	0	189	3	0	9	228	2	0	0	0	2	0	25	0	32	**490**
5:15 PM	to	5:30 PM	0	4	169	2	0	8	211	0	0	3	0	2	0	18	1	15	**433**
5:30 PM	to	5:45 PM	0	0	149	6	0	7	216	1	0	0	0	1	0	16	0	13	**409**
5:45 PM	to	6:00 PM	0	2	134	5	0	6	181	2	0	2	0	0	0	9	0	9	**350**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	8	626	44	0	71	599	14	0	3	0	2	0	75	0	147	**1589**
4:15 PM	to	5:15 PM	0	7	653	32	0	60	673	14	0	2	0	3	0	80	0	139	**1663**
4:30 PM	to	5:30 PM	0	8	677	20	0	54	745	11	0	5	0	5	0	79	1	136	**1741**
4:45 PM	to	5:45 PM	0	5	665	16	0	41	823	8	0	4	0	5	0	67	1	100	**1735**
5:00 PM	to	6:00 PM	0	6	641	16	0	30	836	5	0	5	0	5	0	68	1	69	**1682**

PEAK HOUR SUMMARY

4:30 PM to 5:30 PM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	8	677	20	0	54	745	11	0	5	0	5	0	79	1	136	**1741**
PHF BY MOVEMENT	0.00	0.50	0.90	0.50	0.00	0.68	0.82	0.55	0.00	0.42	0.00	0.63	0.00	0.71	0.25	0.69	OVERALL
PHF BY APPROACH	0.92				0.85				0.50				0.70				**0.89**
PED (Inc JAY-WALK)	9				11				1				6				**27**
BICYCLE	7				6				0				1				**14**

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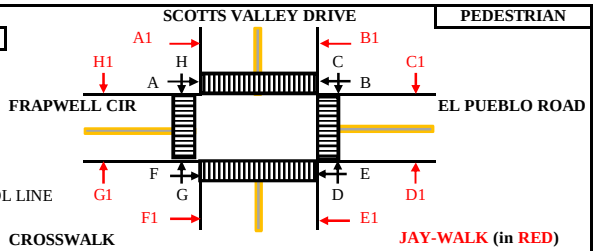
B.A.Y.M.E.T.R.I.C.S.

PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY PERIOD**	**4:00 PM**	**to**	**6:00 PM**
E-W APPROACH:	**FRAPWELL CIR - EL PUEBLO ROAD**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-3PM**

PEAK HOUR SUMMARY

PEAK HOUR 04:30 PM TO 05:30 PM



LEGEND:
- CROSSWALK
- SIDEWALK
- STOP CONTROL LINE

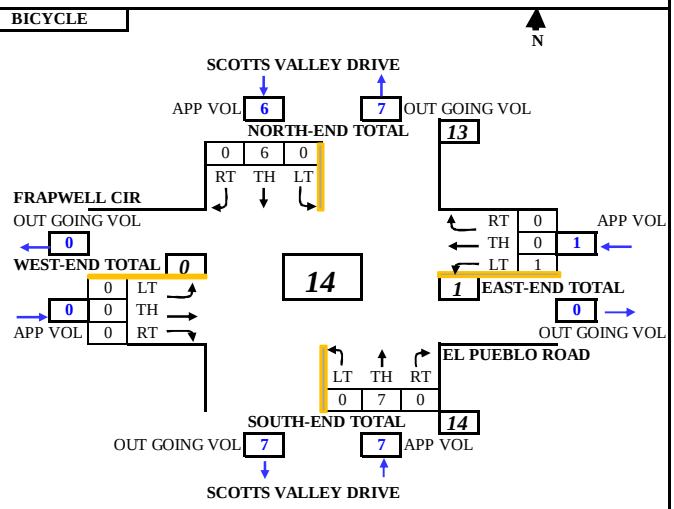
CROSSWALK — **JAY-WALK (in RED)**

A	B	BY LEG N-END	BY DIR NB(D+G)	BY DIR NB(D1+G1)	BY LEG N-END	A1	B1
1	1	2	9	0	0	0	0
C	D	E-END	SB(C+H)	SB(C1+H1)	E-END	C1	D1
6	5	11	11	0	0	0	0
E	F	S-END	EB(A+F)	EB(A1+F1)	S-END	E1	F1
5	0	5	1	0	0	0	0
G	H	W-END	WB(B+E)	WB(B1+E1)	W-END	G1	H1
4	5	9	6	0	0	0	0

TOTAL PEDESTIAN 27 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Inclded JAY-WALK) 27

PEDESTRIAN | **BICYCLE**



SURVEY DATA

TIME From	To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	B	E-END C	D	S-END E	F	W-END G	H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	B1	E-END C1	D1	S-END E1	F1	W-END G1	H1	TOTAL	BICYCLE NB SOUTH-END LT	TH	RT	SB NORTH-END LT	TH	RT	EB WEST-END LT	TH	RT	WB EAST-END LT	TH	RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	1	0	0	0	0	2	1		0	0	0	0	0	0	0	0		0	2	0	0	2	0	0	0	0	0	0	2		10
04:15 PM	04:30 PM	0	3	0	0	0	0	4	2		0	0	0	0	0	0	0	0		0	2	0	0	8	0	0	0	0	0	0	2		21
04:30 PM	04:45 PM	1	3	1	1	0	0	4	6		0	0	0	0	0	0	0	0		0	4	0	0	8	0	0	0	0	1	0	2		31
04:45 PM	05:00 PM	1	3	1	2	3	0	7	6		0	0	0	0	0	0	0	0		0	4	0	0	11	0	0	0	0	1	0	2		41
05:00 PM	05:15 PM	1	3	6	5	4	0	7	6		0	0	0	0	0	0	0	0		0	8	0	0	13	0	0	0	0	1	0	2		56
05:15 PM	05:30 PM	1	4	6	5	5	0	8	7		0	0	0	0	0	0	0	0		0	9	0	0	14	0	0	0	0	1	0	2		62
05:30 PM	05:45 PM	1	4	9	6	5	0	9	11		0	0	0	0	0	0	0	0		0	9	0	0	16	0	0	0	0	1	0	2		73
05:45 PM	06:00 PM	1	5	10	6	5	0	9	11		0	0	0	0	0	0	0	0		0	11	0	0	16	0	0	0	0	1	0	2		77
TOTAL BY PERIOD																																		
04:00 PM	04:15 PM	0	1	0	0	0	0	2	1	4	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	6	10
04:15 PM	04:30 PM	0	2	0	0	0	0	2	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	11
04:30 PM	04:45 PM	1	0	1	1	0	0	0	4	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3	10
04:45 PM	05:00 PM	0	0	0	1	3	0	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	10
05:00 PM	05:15 PM	0	0	5	3	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	4	0	0	2	0	0	0	0	0	0	0	6	15
05:15 PM	05:30 PM	0	1	0	0	1	0	1	1	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	6
05:30 PM	05:45 PM	0	0	3	1	0	0	1	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	11
05:45 PM	06:00 PM	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	4
HOURLY TOTALS																																		
04:00 PM	05:00 PM	1	3	1	2	3	0	7	6	23	0	0	0	0	0	0	0	0	0	0	4	0	0	11	0	0	0	0	1	0	2	18	41
04:15 PM	05:15 PM	1	2	6	5	4	0	5	5	28	0	0	0	0	0	0	0	0	0	0	6	0	0	11	0	0	0	0	1	0	0	18	46
04:30 PM	05:30 PM	1	1	6	5	5	0	4	5	27	0	0	0	0	0	0	0	0	0	0	7	0	0	6	0	0	0	0	1	0	0	14	41
04:45 PM	05:45 PM	0	1	8	5	5	0	5	5	29	0	0	0	0	0	0	0	0	0	0	5	0	0	8	0	0	0	0	0	0	0	13	42
05:00 PM	06:00 PM	0	2	9	4	2	0	2	5	24	0	0	0	0	0	0	0	0	0	0	7	0	0	5	0	0	0	0	0	0	0	12	36

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
04:00 PM	05:00 PM	9	7	1	6	23	9	7	1	6	23	4	11	0	3	18
04:15 PM	05:15 PM	10	11	1	6	28	10	11	1	6	28	6	11	0	1	18
04:30 PM	05:30 PM	9	11	1	6	27	9	11	1	6	27	7	6	0	1	14
04:45 PM	05:45 PM	10	13	0	6	29	10	13	0	6	29	5	8	0	0	13
05:00 PM	06:00 PM	6	14	0	4	24	6	14	0	4	24	7	5	0	0	12

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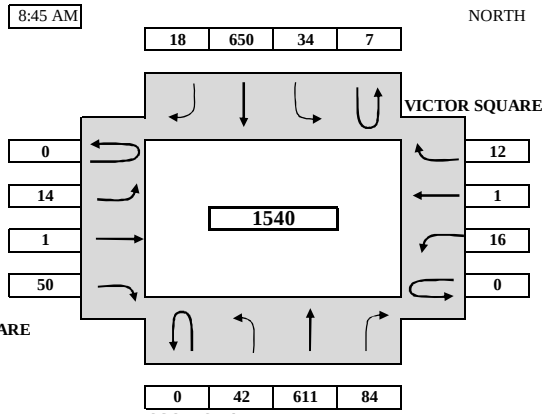
B.A.Y.M.E.T.R.I.C.S.

INTERSECTION TURNING MOVEMENT SUMMARY

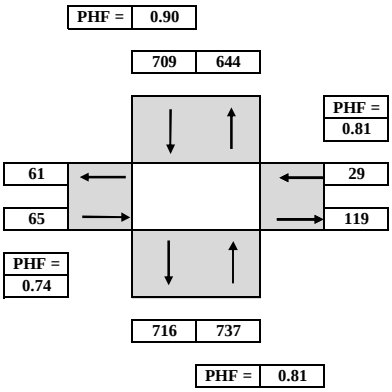
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**7:00 AM**	**TO**	**9:00 AM**
E-W APPROACH:	**VICTOR SQUARE**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-4AM**

PEAK HOUR
7:45 AM to 8:45 AM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
7:00 AM	to	7:15 AM		3	76	2	4	13	64	1		7	1	4		4	0	1	**180**
7:15 AM	to	7:30 AM		15	240	13	5	21	140	2		13	1	16		9	0	3	**478**
7:30 AM	to	7:45 AM		23	354	22	7	32	253	3		22	1	25		11	0	6	**759**
7:45 AM	to	8:00 AM		33	519	53	7	44	411	3		24	1	42		16	0	8	**1161**
8:00 AM	to	8:15 AM		45	708	79	9	52	591	11		28	1	52		21	0	11	**1608**
8:15 AM	to	8:30 AM		55	849	94	9	59	753	16		32	1	70		23	0	14	**1975**
8:30 AM	to	8:45 AM		65	965	106	14	66	903	21		36	2	75		27	1	18	**2299**
8:45 AM	to	9:00 AM		71	1084	122	15	75	1016	23		37	3	96		34	2	18	**2596**
TOTAL BY PERIOD																			
7:00 AM	to	7:15 AM	0	3	76	2	4	13	64	1	0	7	1	4	0	4	0	1	**180**
7:15 AM	to	7:30 AM	0	12	164	11	1	8	76	1	0	6	0	12	0	5	0	2	**298**
7:30 AM	to	7:45 AM	0	8	114	9	2	11	113	1	0	9	0	9	0	2	0	3	**281**
7:45 AM	to	8:00 AM	0	10	165	31	0	12	158	0	0	2	0	17	0	5	0	2	**402**
8:00 AM	to	8:15 AM	0	12	189	26	2	8	180	8	0	4	0	10	0	5	0	3	**447**
8:15 AM	to	8:30 AM	0	10	141	15	0	7	162	5	0	4	0	18	0	2	0	3	**367**
8:30 AM	to	8:45 AM	0	10	116	12	5	7	150	5	0	4	1	5	0	4	1	4	**324**
8:45 AM	to	9:00 AM	0	6	119	16	1	9	113	2	0	1	1	21	0	7	1	0	**297**
HOURLY TOTALS																			
7:00 AM	to	8:00 AM	0	33	519	53	7	44	411	3	0	24	1	42	0	16	0	8	**1161**
7:15 AM	to	8:15 AM	0	42	632	77	5	39	527	10	0	21	0	48	0	17	0	10	**1428**
7:30 AM	to	8:30 AM	0	40	609	81	4	38	613	14	0	19	0	54	0	14	0	11	**1497**
7:45 AM	to	8:45 AM	0	42	611	84	7	34	650	18	0	14	1	50	0	16	1	12	**1540**
8:00 AM	to	9:00 AM	0	38	565	69	8	31	605	20	0	13	2	54	0	18	2	10	**1435**

PEAK HOUR SUMMARY

7:45 AM to 8:45 AM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	0	42	611	84	7	34	650	18	0	14	1	50	0	16	1	12	**1540**
PHF BY MOVEMENT	0.00	0.88	0.81	0.68	0.35	0.71	0.90	0.56	0.00	0.88	0.25	0.69	0.00	0.80	0.25	0.75	OVERALL
PHF BY APPROACH	0.81				0.90				0.74				0.81				**0.86**
PED (Inc JAY-WALK)	2				1				0				0				**3**
BICYCLE	7				6				1				0				**14**

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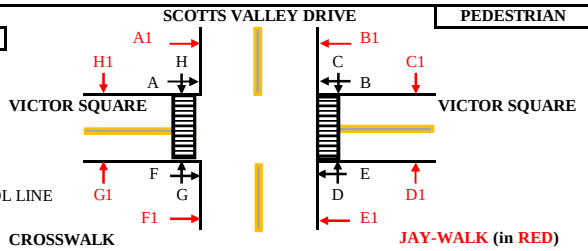
PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	TRAFFIC COUNTS IN SCOTTS VALLEY	**SURVEY DATE:**	2/24/2015	**DAY:**	TUESDAY
N-S APPROACH:	SCOTTS VALLEY DRIVE	**SURVEY PERIOD**	7:00 AM	**to**	9:00 AM
E-W APPROACH:	VICTOR SQUARE	**JURISDICTION:**	SCOTTS VALLEY	**FILE:**	3502024-4AM

PEAK HOUR SUMMARY

PEAK HOUR 07:45 AM TO 08:45 AM



LEGEND:
- CROSSWALK
- SIDEWALK
- STOP CONTROL LINE

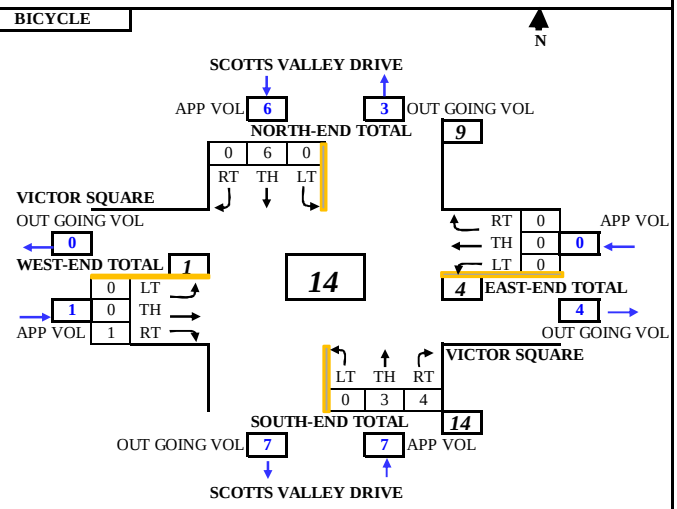
CROSSWALK — **JAY-WALK (in RED)**

A	B	BY LEG N-END	BY DIR NB(D+G)	BY DIR NB(D1+G1)	BY LEG N-END	A1	B1
0	0	0	2	0	0	0	0
C	**D**	**E-END**	**SB(C+H)**	**SB(C1+H1)**	**E-END**	**C1**	**D1**
0	2	2	1	0	0	0	0
E	**F**	**S-END**	**EB(A+F)**	**EB(A1+F1)**	**S-END**	**E1**	**F1**
0	0	0	0	0	0	0	0
G	**H**	**W-END**	**WB(B+E)**	**WB(B1+E1)**	**W-END**	**G1**	**H1**
0	1	1	0	0	0	0	0

TOTAL PEDESTIAN 3 — **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Inclded JAY-WALK) 3

PEDESTRIAN | **BICYCLE**



TIME From	TIME To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	BICYCLE NB SOUTH-END LT	NB TH	NB RT	SB NORTH-END LT	SB TH	SB RT	EB WEST-END LT	EB TH	EB RT	WB EAST-END LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
SURVEY DATA																																	
07:00 AM	07:15 AM	0	0	0	1	0	0	2	1		0	0	0	0	0	0	0	0		0	2	0	0	0	0	0	0	0	0	0	0		6
07:15 AM	07:30 AM	0	0	1	1	0	2	4	1		0	0	0	0	0	0	0	0		0	5	0	0	0	0	0	0	0	0	0	0		14
07:30 AM	07:45 AM	0	0	1	1	0	2	5	1		0	0	0	0	0	0	0	0		0	6	0	0	0	0	0	0	0	0	0	0		16
07:45 AM	08:00 AM	0	0	1	3	0	2	5	2		0	0	0	0	0	0	0	0		0	6	2	0	4	0	0	0	0	0	0	0		25
08:00 AM	08:15 AM	0	0	1	3	0	2	5	2		0	0	0	0	0	0	0	0		0	8	2	0	6	0	0	0	1	0	0	0		30
08:15 AM	08:30 AM	0	0	1	3	0	2	5	2		0	0	0	0	0	0	0	0		0	9	2	0	6	0	0	0	1	0	0	0		31
08:30 AM	08:45 AM	0	0	1	3	0	2	5	2		0	0	0	0	0	0	0	0		0	9	4	0	6	0	0	0	1	0	0	0		33
08:45 AM	09:00 AM	0	0	1	4	1	2	6	3		0	0	0	0	0	0	0	0		0	9	5	0	6	0	0	0	1	0	0	0		38
TOTAL BY PERIOD																																	
07:00 AM	07:15 AM	0	0	0	1	0	0	2	1	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	6
07:15 AM	07:30 AM	0	0	1	0	0	2	2	0	5	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	8
07:30 AM	07:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
07:45 AM	08:00 AM	0	0	0	2	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	0	6	9
08:00 AM	08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	0	0	5	5
08:15 AM	08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2
08:45 AM	09:00 AM	0	0	0	1	1	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5
HOURLY TOTALS																																	
07:00 AM	08:00 AM	0	0	1	3	0	2	5	2	13	0	0	0	0	0	0	0	0	0	0	6	2	0	4	0	0	0	0	0	0	0	12	25
07:15 AM	08:15 AM	0	0	1	2	0	2	3	1	9	0	0	0	0	0	0	0	0	0	0	6	2	0	6	0	0	0	1	0	0	0	15	24
07:30 AM	08:30 AM	0	0	0	2	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	4	2	0	6	0	0	0	1	0	0	0	13	17
07:45 AM	08:45 AM	0	0	0	2	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	3	4	0	6	0	0	0	1	0	0	0	14	17
08:00 AM	09:00 AM	0	0	0	1	1	0	1	1	4	0	0	0	0	0	0	0	0	0	0	3	3	0	2	0	0	0	1	0	0	0	9	13

SUMMARY (HOURLY COUNT)

TIME From	TIME To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
07:00 AM	08:00 AM	8	3	2	0	13	8	3	2	0	13	8	4	0	0	12
07:15 AM	08:15 AM	5	2	2	0	9	5	2	2	0	9	8	6	1	0	15
07:30 AM	08:30 AM	3	1	0	0	4	3	1	0	0	4	6	6	1	0	13
07:45 AM	08:45 AM	2	1	0	0	3	2	1	0	0	3	7	6	1	0	14
08:00 AM	09:00 AM	2	1	0	1	4	2	1	0	1	4	6	2	1	0	9

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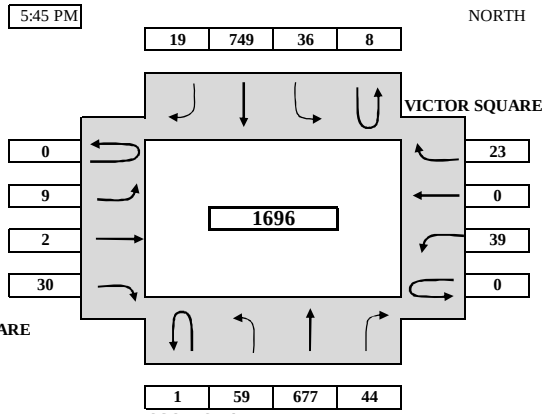
INTERSECTION TURNING MOVEMENT SUMMARY

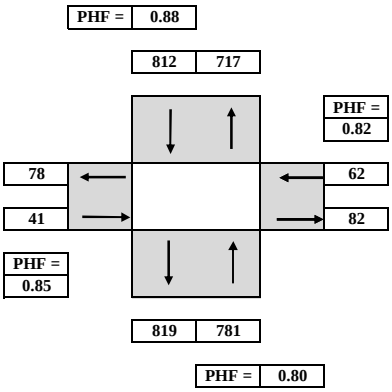
PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY TIME:**	**4:00 PM**	**TO**	**6:00 PM**
E-W APPROACH:	**VICTOR SQUARE**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-4PM**

PEAK HOUR
4:45 PM to 5:45 PM

NORTH



ARRIVAL / DEPARTURE VOLUMES



TIME From		PERIOD To	NORTHBOUND U-TURN	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND U-TURN	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND U-TURN	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND U-TURN	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	TOTAL
SURVEY DATA																			
4:00 PM	to	4:15 PM	0	7	179	13	0	2	154	2		3	0	5		10	1	6	**382**
4:15 PM	to	4:30 PM	0	20	325	24	3	6	281	16		6	0	12		18	1	11	**723**
4:30 PM	to	4:45 PM	0	30	483	36	4	12	419	20		8	1	21		32	1	16	**1083**
4:45 PM	to	5:00 PM	0	43	638	56	6	19	580	23		9	1	30		38	1	24	**1468**
5:00 PM	to	5:15 PM	1	61	854	66	8	28	753	25		10	1	36		51	1	30	**1925**
5:15 PM	to	5:30 PM	1	78	1001	73	10	44	961	31		15	1	43		63	1	34	**2356**
5:30 PM	to	5:45 PM	1	89	1160	80	12	48	1168	39		17	3	51		71	1	39	**2779**
5:45 PM	to	6:00 PM	1	103	1284	88	13	58	1346	46		19	4	59		75	1	42	**3139**
TOTAL BY PERIOD																			
4:00 PM	to	4:15 PM	0	7	179	13	0	2	154	2	0	3	0	5	0	10	1	6	**382**
4:15 PM	to	4:30 PM	0	13	146	11	3	4	127	14	0	3	0	7	0	8	0	5	**341**
4:30 PM	to	4:45 PM	0	10	158	12	1	6	138	4	0	2	1	9	0	14	0	5	**360**
4:45 PM	to	5:00 PM	0	13	155	20	2	7	161	3	0	1	0	9	0	6	0	8	**385**
5:00 PM	to	5:15 PM	1	18	216	10	2	9	173	2	0	1	0	6	0	13	0	6	**457**
5:15 PM	to	5:30 PM	0	17	147	7	2	16	208	6	0	5	0	7	0	12	0	4	**431**
5:30 PM	to	5:45 PM	0	11	159	7	2	4	207	8	0	2	2	8	0	8	0	5	**423**
5:45 PM	to	6:00 PM	0	14	124	8	1	10	178	7	0	2	1	8	0	4	0	3	**360**
HOURLY TOTALS																			
4:00 PM	to	5:00 PM	0	43	638	56	6	19	580	23	0	9	1	30	0	38	1	24	**1468**
4:15 PM	to	5:15 PM	1	54	675	53	8	26	599	23	0	7	1	31	0	41	0	24	**1543**
4:30 PM	to	5:30 PM	1	58	676	49	7	38	680	15	0	9	1	31	0	45	0	23	**1633**
4:45 PM	to	5:45 PM	1	59	677	44	8	36	749	19	0	9	2	30	0	39	0	23	**1696**
5:00 PM	to	6:00 PM	1	60	646	32	7	39	766	23	0	10	3	29	0	37	0	18	**1671**

PEAK HOUR SUMMARY

4:45 PM to 5:45 PM	NORTHBOUND NBU	NBL	NBT	NBR	SOUTHBOUND SBU	SBL	SBT	SBR	EASTBOUND EBU	EBL	EBT	EBR	WESTBOUND WBU	WBL	WBT	WBR	TOTAL
VOLUME	1	59	677	44	8	36	749	19	0	9	2	30	0	39	0	23	**1696**
PHF BY MOVEMENT	0.25	0.82	0.78	0.55	1.00	0.56	0.90	0.59	0.00	0.45	0.25	0.83	0.00	0.75	0.00	0.72	OVERALL
PHF BY APPROACH	0.80				0.88				0.85				0.82				**0.93**
PED (Inc JAY-WALK)	9				17				0				0				**26**
BICYCLE	8				8				0				0				**16**

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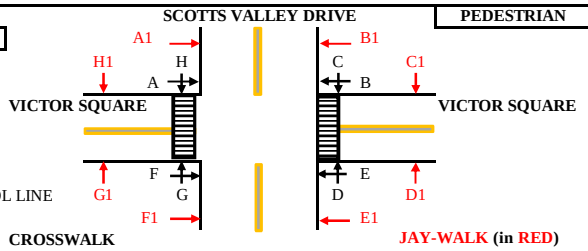
PEDESTRIAN & BICYCLE MOVEMENT SUMMARY

PROJECT:	**TRAFFIC COUNTS IN SCOTTS VALLEY**	**SURVEY DATE:**	**2/24/2015**	**DAY:**	**TUESDAY**
N-S APPROACH:	**SCOTTS VALLEY DRIVE**	**SURVEY PERIOD**	**4:00 PM**	**to**	**6:00 PM**
E-W APPROACH:	**VICTOR SQUARE**	**JURISDICTION:**	**SCOTTS VALLEY**	**FILE:**	**3502024-4PM**

PEAK HOUR SUMMARY

PEAK HOUR 04:45 PM TO 05:45 PM

PEDESTRIAN | **BICYCLE**



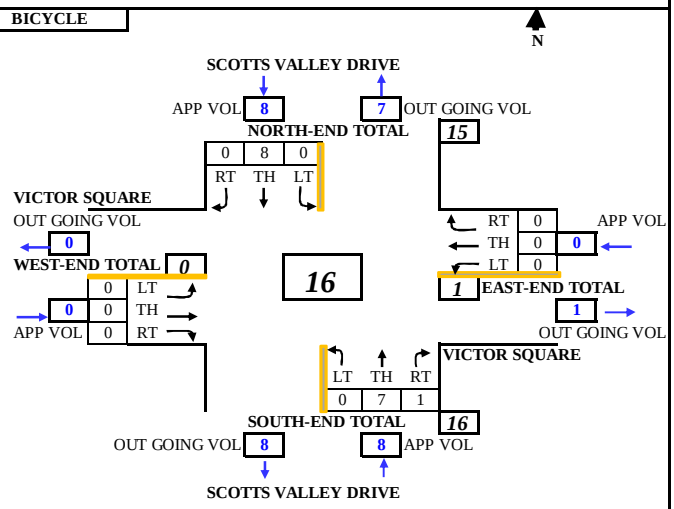
LEGEND:
- CROSSWALK
- SIDEWALK
- STOP CONTROL LINE

CROSSWALK | **JAY-WALK (in RED)**

A	B	BY LEG N-END	BY DIR NB(D+G)	BY DIR NB(D1+G1)	BY LEG N-END	A1	B1
0	0	0	9	0	0	0	0
C	**D**	**E-END**	**SB(C+H)**	**SB(C1+H1)**	**E-END**	**C1**	**D1**
11	5	16	17	0	0	0	0
E	**F**	**S-END**	**EB(A+F)**	**EB(A1+F1)**	**S-END**	**E1**	**F1**
0	0	0	0	0	0	0	0
G	**H**	**W-END**	**WB(B+E)**	**WB(B1+E1)**	**W-END**	**G1**	**H1**
4	6	10	0	0	0	0	0

TOTAL PEDESTIAN 26 | **TOTAL JAY-WALK** 0

TOTAL PEDESTIAN (Inclded JAY-WALK) 26



SURVEY DATA

TIME From	To	PEDESTRIAN @ CROSSWALK / STOP LINE N-END A	N-END B	E-END C	E-END D	S-END E	S-END F	W-END G	W-END H	TOTAL	JAY-WALK (From Intersection to Midblock) N-END A1	N-END B1	E-END C1	E-END D1	S-END E1	S-END F1	W-END G1	W-END H1	TOTAL	BICYCLE NB SOUTH-END LT	NB TH	NB RT	SB NORTH-END LT	SB TH	SB RT	EB WEST-END LT	EB TH	EB RT	WB EAST-END LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	0	2	2	0	0	0	0		0	0	0	0	0	0	0	0		1	3	0	0	1	0	0	0	0	1	0	0		10
04:15 PM	04:30 PM	0	0	3	5	0	0	0	1		0	0	0	0	0	0	0	0		1	5	0	0	6	0	0	0	0	2	0	0		23
04:30 PM	04:45 PM	0	0	3	5	0	0	0	1		0	0	0	0	0	0	0	0		1	7	0	0	8	0	0	0	0	2	0	0		27
04:45 PM	05:00 PM	0	0	4	5	0	0	2	4		0	0	0	0	0	0	0	0		1	8	0	0	8	0	0	0	0	2	0	0		34
05:00 PM	05:15 PM	0	0	9	6	0	0	2	5		0	0	0	0	0	0	0	0		1	11	0	0	13	0	0	0	0	2	0	0		49
05:15 PM	05:30 PM	0	0	12	10	0	0	3	5		0	0	0	0	0	0	0	0		1	13	1	0	13	0	0	0	0	2	0	0		60
05:30 PM	05:45 PM	0	0	14	10	0	0	4	7		0	0	0	0	0	0	0	0		1	14	1	0	16	0	0	0	0	2	0	0		69
05:45 PM	06:00 PM	0	0	14	10	0	0	5	7		0	0	0	0	0	0	0	0		1	17	1	0	16	0	0	0	0	2	0	0		73

TOTAL BY PERIOD

TIME From	To	A	B	C	D	E	F	G	H	TOTAL	A1	B1	C1	D1	E1	F1	G1	H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	04:15 PM	0	0	2	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	3	0	0	1	0	0	0	0	1	0	0	6	10
04:15 PM	04:30 PM	0	0	1	3	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	0	0	1	0	0	8	13
04:30 PM	04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4	4
04:45 PM	05:00 PM	0	0	1	0	0	0	2	3	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	7
05:00 PM	05:15 PM	0	0	5	1	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	8	15
05:15 PM	05:30 PM	0	0	3	4	0	0	1	0	8	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	11
05:30 PM	05:45 PM	0	0	2	0	0	0	1	2	5	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	4	9
05:45 PM	06:00 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	4

HOURLY TOTALS

TIME From	To	A	B	C	D	E	F	G	H	TOTAL	A1	B1	C1	D1	E1	F1	G1	H1	TOTAL	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	TOTAL	OVER ALL TOTAL
04:00 PM	05:00 PM	0	0	4	5	0	0	2	4	15	0	0	0	0	0	0	0	0	0	1	8	0	0	8	0	0	0	0	2	0	0	19	34
04:15 PM	05:15 PM	0	0	7	4	0	0	2	5	18	0	0	0	0	0	0	0	0	0	0	8	0	0	12	0	0	0	0	1	0	0	21	39
04:30 PM	05:30 PM	0	0	9	5	0	0	3	4	21	0	0	0	0	0	0	0	0	0	0	8	1	0	7	0	0	0	0	0	0	0	16	37
04:45 PM	05:45 PM	0	0	11	5	0	0	4	6	26	0	0	0	0	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	0	16	42
05:00 PM	06:00 PM	0	0	10	5	0	0	3	3	21	0	0	0	0	0	0	0	0	0	0	9	1	0	8	0	0	0	0	0	0	0	18	39

SUMMARY (HOURLY COUNT)

TIME From	To	PEDESTRIAN COUNTS BY DIRECTION NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	PEDESTRIAN COUNTS (INCLUDED JAY-WALK) NB(D+G)	SB(C+H)	EB(A+F)	WB(B+E)	TOTAL	BICYCLE COUNTS NB	SB	EB	WB	TOTAL
04:00 PM	05:00 PM	7	8	0	0	15	7	8	0	0	15	9	8	0	2	19
04:15 PM	05:15 PM	6	12	0	0	18	6	12	0	0	18	8	12	0	1	21
04:30 PM	05:30 PM	8	13	0	0	21	8	13	0	0	21	9	7	0	0	16
04:45 PM	05:45 PM	9	17	0	0	26	9	17	0	0	26	8	8	0	0	16
05:00 PM	06:00 PM	8	13	0	0	21	8	13	0	0	21	10	8	0	0	18

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Appendix C – Level of Service Worksheets: Existing Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	17	0	7	1	809	108	63	609	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				40	0	16	1	975	130	71	684	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.43	0.43	0.43	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				78	0	70	4	1975	263	91	2410	0
Arrive On Green				0.04	0.00	0.04	0.00	0.63	0.63	0.05	0.68	0.00
Sat Flow, veh/h				1774	0	1583	1774	3130	417	1774	3632	0
Grp Volume(v), veh/h				40	0	16	1	551	554	71	684	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1777	1774	1770	0
Q Serve(g_s), s				1.0	0.0	0.5	0.0	7.9	7.9	1.9	3.6	0.0
Cycle Q Clear(g_c), s				1.0	0.0	0.5	0.0	7.9	7.9	1.9	3.6	0.0
Prop In Lane				1.00		1.00	1.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h				78	0	70	4	1116	1121	91	2410	0
V/C Ratio(X)				0.51	0.00	0.23	0.27	0.49	0.49	0.78	0.28	0.00
Avail Cap(c_a), veh/h				934	0	834	747	1491	1498	747	2982	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.2	0.0	21.9	23.7	4.7	4.7	22.3	3.0	0.0
Incr Delay (d2), s/veh				1.9	0.0	0.6	13.5	0.5	0.5	5.4	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
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.2	0.0	4.0	4.0	1.0	1.7	0.0
LnGrp Delay(d),s/veh				24.1	0.0	22.5	37.2	5.2	5.2	27.6	3.1	0.0
LnGrp LOS				C		C	D	A	A	C	A	
Approach Vol, veh/h					56			1106			755	
Approach Delay, s/veh					23.7			5.2			5.4	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.4	34.9			4.1	37.3		6.1
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	3.9	9.9			2.0	5.6		3.0
Green Ext Time (p_c), s	0.0	20.0			0.0	21.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.1	36.1	62.0	72.6
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.73	2.80
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	56	1106	755
Effct. Green for Bike (s)	0.0	0.0	35.1	43.2
Cross Street Width (ft)	62.0	72.6	36.1	12.1
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	716	882
Bicycle Delay (s/bike)	0.0	0.0	20.2	15.3
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	3.02	2.37
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	9	7	929	613	7
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	41	41	94	94	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	22	7	988	674	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1186	345	681	0	-	0
Stage 1	677	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	181	651	907	-	-	-
Stage 1	466	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	180	649	904	-	-	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	466	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	904	-	489	-	-
HCM Lane V/C Ratio	0.008	-	0.065	-	-
HCM Control Delay (s)	9	-	12.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	16	0	4	19	1	54	5	711	82	76	632	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	0	8	30	2	84	6	808	93	87	726	10
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.64	0.64	0.64	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	0	13	138	9	130	11	1629	188	112	2028	28
Arrive On Green	0.04	0.00	0.04	0.08	0.08	0.08	0.01	0.51	0.51	0.06	0.57	0.57
Sat Flow, veh/h	1385	0	346	1668	111	1572	1774	3190	367	1774	3573	49
Grp Volume(v), veh/h	40	0	0	32	0	84	6	448	453	87	360	376
Grp Sat Flow(s),veh/h/ln	1731	0	0	1779	0	1572	1774	1770	1788	1774	1770	1853
Q Serve(g_s), s	1.3	0.0	0.0	0.9	0.0	2.9	0.2	9.2	9.2	2.7	6.1	6.1
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.9	0.0	2.9	0.2	9.2	9.2	2.7	6.1	6.1
Prop In Lane	0.80		0.20	0.94		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	63	0	0	147	0	130	11	904	913	112	1004	1052
V/C Ratio(X)	0.63	0.00	0.00	0.22	0.00	0.65	0.53	0.50	0.50	0.77	0.36	0.36
Avail Cap(c_a), veh/h	812	0	0	835	0	738	640	1278	1291	640	1278	1338
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	0.0	23.7	0.0	24.6	27.4	8.9	8.9	25.6	6.5	6.5
Incr Delay (d2), s/veh	3.8	0.0	0.0	0.3	0.0	2.0	13.6	0.6	0.6	4.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.0	1.3	0.1	4.6	4.7	1.4	3.0	3.1
LnGrp Delay(d),s/veh	30.1	0.0	0.0	24.0	0.0	26.6	41.0	9.5	9.5	29.8	6.8	6.8
LnGrp LOS	C			C		C	D	A	A	C	A	A
Approach Vol, veh/h		40			116			907			823	
Approach Delay, s/veh		30.1			25.9			9.7			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	33.3		6.0	4.4	36.4		8.6
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	11.2		3.3	2.2	8.1		4.9
Green Ext Time (p_c), s	0.1	17.1		0.1	0.0	18.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.04	2.70	2.72
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	40	116	907	823
Effct. Green for Bike (s)	7.7	8.6	34.7	44.0
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	119	133	538	682
Bicycle Delay (s/bike)	57.0	56.2	34.5	28.0
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	2.57	2.70	2.88	2.62
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	1	50	16	1	12	42	611	84	41	650	18
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	81	81	81	81	81	81	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	1	68	20	1	15	52	754	104	46	722	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1304	1785	373	1363	1743	431	742	0	0	858	0	0
Stage 1	823	823	-	910	910	-	-	-	-	-	-	-
Stage 2	481	962	-	453	833	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	118	81	624	107	86	573	861	-	-	779	-	-
Stage 1	334	386	-	296	352	-	-	-	-	-	-	-
Stage 2	535	332	-	556	382	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	72	623	86	76	572	860	-	-	778	-	-
Mov Cap-2 Maneuver	103	72	-	86	76	-	-	-	-	-	-	-
Stage 1	314	363	-	278	331	-	-	-	-	-	-	-
Stage 2	487	312	-	464	359	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.4	42.1	0.5	0.6
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	860	-	-	100	623	132	778	-	-
HCM Lane V/C Ratio	0.06	-	-	0.203	0.108	0.271	0.059	-	-
HCM Control Delay (s)	9.5	-	-	49.9	11.5	42.1	9.9	-	-
HCM Lane LOS	A	-	-	E	B	E	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.4	1	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	86	0	49	1	655	10	10	766	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				148	0	84	1	697	11	10	790	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.58	0.58	0.58	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				223	0	199	4	1999	32	19	2018	0
Arrive On Green				0.13	0.00	0.13	0.00	0.56	0.56	0.01	0.57	0.00
Sat Flow, veh/h				1774	0	1583	1774	3564	56	1774	3632	0
Grp Volume(v), veh/h				148	0	84	1	346	362	10	790	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1850	1774	1770	0
Q Serve(g_s), s				3.4	0.0	2.1	0.0	4.6	4.6	0.2	5.3	0.0
Cycle Q Clear(g_c), s				3.4	0.0	2.1	0.0	4.6	4.6	0.2	5.3	0.0
Prop In Lane				1.00		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				223	0	199	4	993	1038	19	2018	0
V/C Ratio(X)				0.66	0.00	0.42	0.24	0.35	0.35	0.54	0.39	0.00
Avail Cap(c_a), veh/h				1034	0	923	827	1650	1725	827	3300	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				17.9	0.0	17.3	21.4	5.1	5.1	21.1	5.1	0.0
Incr Delay (d2), s/veh				1.3	0.0	0.5	10.8	0.3	0.3	8.7	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
%ile BackOfQ(50%),veh/ln				1.7	0.0	1.0	0.0	2.3	2.4	0.2	2.6	0.0
LnGrp Delay(d),s/veh				19.2	0.0	17.9	32.2	5.4	5.4	29.8	5.3	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					232			709			800	
Approach Delay, s/veh					18.7			5.5			5.6	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.4	29.1			4.0	29.5		9.4
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	2.2	6.6			2.0	7.3		5.4
Green Ext Time (p_c), s	0.0	17.4			0.0	17.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	36.1	62.0	72.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.69	2.77
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	232	709	800
Effct. Green for Bike (s)	0.0	0.0	21.4	21.6
Cross Street Width (ft)	62.0	72.7	36.1	12.0
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	437	441
Bicycle Delay (s/bike)	0.0	0.0	29.9	29.8
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	2.70	2.40
Bicycle LOS			B	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	2	6	677	890	3
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	88	88	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	7	769	1023	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1423	520	1026	0	-	0
Stage 1	1025	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	127	501	673	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	126	498	669	-	-	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	640	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	669	-	364	-	-
HCM Lane V/C Ratio	0.01	-	0.022	-	-
HCM Control Delay (s)	10.4	-	15.1	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	0	5	79	1	136	8	677	20	54	745	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	0	10	113	1	194	9	736	22	64	876	13
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	30	295	3	261	16	1634	49	81	1794	27
Arrive On Green	0.04	0.00	0.04	0.17	0.17	0.17	0.01	0.47	0.47	0.05	0.50	0.50
Sat Flow, veh/h	827	0	827	1759	16	1557	1774	3504	105	1774	3568	53
Grp Volume(v), veh/h	20	0	0	114	0	194	9	372	386	64	434	455
Grp Sat Flow(s),veh/h/ln	1653	0	0	1775	0	1557	1774	1770	1840	1774	1770	1851
Q Serve(g_s), s	0.7	0.0	0.0	3.4	0.0	7.1	0.3	8.5	8.5	2.1	9.7	9.7
Cycle Q Clear(g_c), s	0.7	0.0	0.0	3.4	0.0	7.1	0.3	8.5	8.5	2.1	9.7	9.7
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	60	0	0	297	0	261	16	825	858	81	890	931
V/C Ratio(X)	0.33	0.00	0.00	0.38	0.00	0.74	0.55	0.45	0.45	0.79	0.49	0.49
Avail Cap(c_a), veh/h	719	0	0	771	0	677	593	1183	1230	593	1183	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	0.0	22.1	0.0	23.7	29.5	10.8	10.8	28.2	9.8	9.8
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	1.6	10.1	0.5	0.5	6.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.7	0.0	3.1	0.2	4.3	4.4	1.2	4.9	5.1
LnGrp Delay(d),s/veh	29.3	0.0	0.0	22.4	0.0	25.3	39.6	11.3	11.3	34.4	10.4	10.4
LnGrp LOS	C			C		C	D	B	B	C	B	B
Approach Vol, veh/h		20			308			767			953	
Approach Delay, s/veh		29.3			24.2			11.7			12.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	32.9		6.2	4.6	35.1		14.0
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.1	10.5		2.7	2.3	11.7		9.1
Green Ext Time (p_c), s	0.1	17.4		0.0	0.0	17.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.07	2.73	2.75
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	20	308	767	953
Effct. Green for Bike (s)	8.0	11.6	25.7	31.2
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	124	180	398	484
Bicycle Delay (s/bike)	56.7	53.4	41.4	37.1
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.54	3.02	2.77	2.73
Bicycle LOS	B	C	C	B

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	9	2	30	39	0	23	60	677	44	44	749	19
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	80	80	80	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	35	48	0	28	75	846	55	50	851	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1535	2013	452	1551	1997	467	873	0	0	901	0	0
Stage 1	962	962	-	1024	1024	-	-	-	-	-	-	-
Stage 2	573	1051	-	527	973	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	79	58	555	77	59	542	768	-	-	750	-	-
Stage 1	275	332	-	252	311	-	-	-	-	-	-	-
Stage 2	472	302	-	502	329	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	49	548	60	50	535	758	-	-	740	-	-
Mov Cap-2 Maneuver	65	49	-	60	50	-	-	-	-	-	-	-
Stage 1	248	310	-	227	280	-	-	-	-	-	-	-
Stage 2	398	272	-	429	307	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.1	140.5	0.8	0.6
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	758	-	-	61	548	89	740	-	-
HCM Lane V/C Ratio	0.099	-	-	0.212	0.064	0.85	0.068	-	-
HCM Control Delay (s)	10.3	-	-	79.3	12	140.5	10.2	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	0.2	4.6	0.2	-	-

Appendix D – Level of Service Worksheets: Existing plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	17	0	9	1	821	108	65	622	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				40	0	21	1	989	130	73	699	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.43	0.43	0.43	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				82	0	73	4	1981	260	92	2415	0
Arrive On Green				0.05	0.00	0.05	0.00	0.63	0.63	0.05	0.68	0.00
Sat Flow, veh/h				1774	0	1583	1774	3136	412	1774	3632	0
Grp Volume(v), veh/h				40	0	21	1	558	561	73	699	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1778	1774	1770	0
Q Serve(g_s), s				1.1	0.0	0.6	0.0	8.2	8.2	2.0	3.8	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.6	0.0	8.2	8.2	2.0	3.8	0.0
Prop In Lane				1.00		1.00	1.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h				82	0	73	4	1118	1123	92	2415	0
V/C Ratio(X)				0.49	0.00	0.29	0.27	0.50	0.50	0.79	0.29	0.00
Avail Cap(c_a), veh/h				922	0	823	737	1471	1478	737	2942	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.4	0.0	22.2	24.0	4.8	4.8	22.6	3.0	0.0
Incr Delay (d2), s/veh				1.7	0.0	0.8	13.9	0.5	0.5	5.7	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
%ile BackOfQ(50%),veh/ln				0.5	0.0	0.3	0.0	4.0	4.1	1.1	1.8	0.0
LnGrp Delay(d),s/veh				24.0	0.0	23.0	37.9	5.3	5.3	28.3	3.1	0.0
LnGrp LOS				C		C	D	A	A	C	A	
Approach Vol, veh/h					61			1120			772	
Approach Delay, s/veh					23.7			5.3			5.5	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.5	35.4			4.1	37.8		6.2
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	4.0	10.2			2.0	5.8		3.1
Green Ext Time (p_c), s	0.0	20.2			0.0	22.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	36.1	62.0	72.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.03	2.74	2.80
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	61	1120	772
Effct. Green for Bike (s)	0.0	0.0	35.7	43.8
Cross Street Width (ft)	62.0	72.8	36.1	12.0
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	729	894
Bicycle Delay (s/bike)	0.0	0.0	19.8	15.0
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	3.04	2.38
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	16	18	15	935	619	16
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	41	41	94	94	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	44	16	995	680	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1218	353	698	0	-	0
Stage 1	689	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	173	643	894	-	-	-
Stage 1	460	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	170	641	891	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	460	-	-	-	-	-
Stage 2	545	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	891	-	421	-	-
HCM Lane V/C Ratio	0.018	-	0.197	-	-
HCM Control Delay (s)	9.1	-	15.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	16	0	4	21	1	54	5	727	84	76	648	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	0	8	33	2	84	6	826	95	87	745	10
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.64	0.64	0.64	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	0	13	140	8	131	11	1642	189	112	2044	27
Arrive On Green	0.04	0.00	0.04	0.08	0.08	0.08	0.01	0.51	0.51	0.06	0.57	0.57
Sat Flow, veh/h	1385	0	346	1677	102	1572	1774	3191	367	1774	3575	48
Grp Volume(v), veh/h	40	0	0	35	0	84	6	458	463	87	369	386
Grp Sat Flow(s),veh/h/ln	1731	0	0	1779	0	1572	1774	1770	1788	1774	1770	1853
Q Serve(g_s), s	1.3	0.0	0.0	1.0	0.0	2.9	0.2	9.5	9.5	2.7	6.3	6.3
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.0	0.0	2.9	0.2	9.5	9.5	2.7	6.3	6.3
Prop In Lane	0.80		0.20	0.94		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	63	0	0	148	0	131	11	911	920	112	1012	1059
V/C Ratio(X)	0.63	0.00	0.00	0.24	0.00	0.64	0.53	0.50	0.50	0.77	0.36	0.36
Avail Cap(c_a), veh/h	800	0	0	822	0	727	631	1258	1271	631	1258	1318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	0.0	0.0	24.1	0.0	25.0	27.9	8.9	8.9	25.9	6.5	6.5
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.3	0.0	2.0	13.6	0.6	0.6	4.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.0	1.3	0.1	4.7	4.8	1.5	3.2	3.3
LnGrp Delay(d),s/veh	30.6	0.0	0.0	24.4	0.0	26.9	41.5	9.6	9.5	30.2	6.8	6.8
LnGrp LOS	C			C		C	D	A	A	C	A	A
Approach Vol, veh/h		40			119			927			842	
Approach Delay, s/veh		30.6			26.2			9.8			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	34.0		6.1	4.4	37.2		8.7
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	11.5		3.3	2.2	8.3		4.9
Green Ext Time (p_c), s	0.1	17.4		0.1	0.0	18.6		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.05	2.71	2.73
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	40	119	927	842
Effct. Green for Bike (s)	7.7	8.6	35.3	44.6
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	119	133	547	691
Bicycle Delay (s/bike)	57.0	56.2	34.0	27.6
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	2.57	2.70	2.90	2.64
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	1	50	18	1	12	42	625	86	41	664	18
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	81	81	81	81	81	81	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	1	68	22	1	15	52	772	106	46	738	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1329	1820	381	1389	1777	441	758	0	0	878	0	0
Stage 1	839	839	-	928	928	-	-	-	-	-	-	-
Stage 2	490	981	-	461	849	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	113	77	617	102	82	564	849	-	-	765	-	-
Stage 1	326	379	-	288	345	-	-	-	-	-	-	-
Stage 2	529	326	-	550	375	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	68	616	81	72	563	848	-	-	764	-	-
Mov Cap-2 Maneuver	99	68	-	81	72	-	-	-	-	-	-	-
Stage 1	306	356	-	270	324	-	-	-	-	-	-	-
Stage 2	481	306	-	458	352	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21	48.5	0.5	0.6
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	848	-	-	96	616	120	764	-	-
HCM Lane V/C Ratio	0.061	-	-	0.211	0.11	0.319	0.06	-	-
HCM Control Delay (s)	9.5	-	-	52.3	11.6	48.5	10	-	-
HCM Lane LOS	A	-	-	F	B	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.4	1.3	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	86	0	51	1	670	10	11	776	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				148	0	88	1	713	11	11	800	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.58	0.58	0.58	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				223	0	199	4	2008	31	20	2030	0
Arrive On Green				0.13	0.00	0.13	0.00	0.56	0.56	0.01	0.57	0.00
Sat Flow, veh/h				1774	0	1583	1774	3565	55	1774	3632	0
Grp Volume(v), veh/h				148	0	88	1	354	370	11	800	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1851	1774	1770	0
Q Serve(g_s), s				3.5	0.0	2.2	0.0	4.7	4.7	0.3	5.4	0.0
Cycle Q Clear(g_c), s				3.5	0.0	2.2	0.0	4.7	4.7	0.3	5.4	0.0
Prop In Lane				1.00		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				223	0	199	4	997	1042	20	2030	0
V/C Ratio(X)				0.66	0.00	0.44	0.24	0.35	0.36	0.54	0.39	0.00
Avail Cap(c_a), veh/h				1022	0	912	818	1631	1706	818	3262	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				18.1	0.0	17.6	21.6	5.2	5.2	21.3	5.1	0.0
Incr Delay (d2), s/veh				1.3	0.0	0.6	11.0	0.3	0.3	8.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	1.0	0.0	2.3	2.4	0.2	2.6	0.0
LnGrp Delay(d),s/veh				19.4	0.0	18.1	32.7	5.5	5.5	29.4	5.3	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					236			725			811	
Approach Delay, s/veh					18.9			5.5			5.6	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.5	29.4			4.0	29.9		9.5
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	2.3	6.7			2.0	7.4		5.5
Green Ext Time (p_c), s	0.0	17.7			0.0	17.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	36.1	62.0	73.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.69	2.77
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	236	725	811
Effct. Green for Bike (s)	0.0	0.0	21.9	22.0
Cross Street Width (ft)	62.0	73.0	36.1	12.0
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	447	449
Bicycle Delay (s/bike)	0.0	0.0	29.5	29.5
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	2.71	2.41
Bicycle LOS			B	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	9	8	17	683	895	15
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	88	88	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	21	19	776	1029	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1464	530	1046	0	-	0
Stage 1	1037	-	-	-	-	-
Stage 2	427	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	119	493	661	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	116	490	657	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	657	-	307	-	-
HCM Lane V/C Ratio	0.029	-	0.146	-	-
HCM Control Delay (s)	10.6	-	18.7	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	0	5	81	1	136	8	689	21	54	764	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	0	10	116	1	194	9	749	23	64	899	13
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	30	294	3	260	16	1646	51	81	1809	26
Arrive On Green	0.04	0.00	0.04	0.17	0.17	0.17	0.01	0.47	0.47	0.05	0.51	0.51
Sat Flow, veh/h	826	0	826	1760	15	1557	1774	3501	107	1774	3570	52
Grp Volume(v), veh/h	20	0	0	117	0	194	9	378	394	64	446	466
Grp Sat Flow(s),veh/h/ln	1653	0	0	1775	0	1557	1774	1770	1839	1774	1770	1852
Q Serve(g_s), s	0.7	0.0	0.0	3.6	0.0	7.2	0.3	8.7	8.7	2.2	10.1	10.1
Cycle Q Clear(g_c), s	0.7	0.0	0.0	3.6	0.0	7.2	0.3	8.7	8.7	2.2	10.1	10.1
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	60	0	0	297	0	260	16	832	864	81	897	938
V/C Ratio(X)	0.34	0.00	0.00	0.39	0.00	0.74	0.55	0.45	0.46	0.79	0.50	0.50
Avail Cap(c_a), veh/h	709	0	0	762	0	668	586	1168	1214	586	1168	1223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	0.0	22.5	0.0	24.0	29.9	10.8	10.8	28.6	9.9	9.9
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	1.6	10.1	0.6	0.5	6.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.7	0.0	3.2	0.2	4.3	4.5	1.2	5.0	5.2
LnGrp Delay(d),s/veh	29.7	0.0	0.0	22.8	0.0	25.6	40.0	11.4	11.4	34.8	10.5	10.4
LnGrp LOS	C			C		C	D	B	B	C	B	B
Approach Vol, veh/h		20			311			781			976	
Approach Delay, s/veh		29.7			24.5			11.7			12.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	33.5		6.2	4.6	35.7		14.1
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.2	10.7		2.7	2.3	12.1		9.2
Green Ext Time (p_c), s	0.1	17.7		0.0	0.0	17.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.07	2.74	2.76
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	20	311	781	976
Effct. Green for Bike (s)	7.9	11.7	26.4	31.8
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	122	181	409	493
Bicycle Delay (s/bike)	56.8	53.3	40.8	36.6
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.54	3.02	2.78	2.75
Bicycle LOS	B	C	C	C

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	9	2	30	41	0	23	60	688	45	44	766	19
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	80	80	80	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	35	50	0	28	75	860	56	50	870	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1561	2047	462	1574	2030	474	892	0	0	916	0	0
Stage 1	981	981	-	1038	1038	-	-	-	-	-	-	-
Stage 2	580	1066	-	536	992	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	76	55	547	74	57	537	756	-	-	740	-	-
Stage 1	268	326	-	247	306	-	-	-	-	-	-	-
Stage 2	467	297	-	496	322	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	46	540	57	48	530	746	-	-	730	-	-
Mov Cap-2 Maneuver	62	46	-	57	48	-	-	-	-	-	-	-
Stage 1	241	304	-	222	275	-	-	-	-	-	-	-
Stage 2	393	267	-	423	300	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.4	166.7	0.8	0.5
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	746	-	-	58	540	84	730	-	-
HCM Lane V/C Ratio	0.101	-	-	0.223	0.065	0.929	0.068	-	-
HCM Control Delay (s)	10.4	-	-	84.1	12.1	166.7	10.3	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.2	5.1	0.2	-	-

Appendix E – Level of Service Worksheets: Background Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	17	0	7	1	843	108	63	641	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				40	0	16	1	1016	130	71	720	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.43	0.43	0.43	0.83	0.83	0.83	0.89	0.89	0.92
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				77	0	69	4	2009	257	90	2435	0
Arrive On Green				0.04	0.00	0.04	0.00	0.64	0.64	0.05	0.69	0.00
Sat Flow, veh/h				1774	0	1583	1774	3148	402	1774	3632	0
Grp Volume(v), veh/h				40	0	16	1	571	575	71	720	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1780	1774	1770	0
Q Serve(g_s), s				1.1	0.0	0.5	0.0	8.4	8.4	1.9	3.9	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.5	0.0	8.4	8.4	1.9	3.9	0.0
Prop In Lane				1.00		1.00	1.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h				77	0	69	4	1129	1136	90	2435	0
V/C Ratio(X)				0.52	0.00	0.23	0.27	0.51	0.51	0.79	0.30	0.00
Avail Cap(c_a), veh/h				912	0	814	730	1456	1465	730	2912	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.7	0.0	22.5	24.2	4.7	4.7	22.8	3.0	0.0
Incr Delay (d2), s/veh				2.0	0.0	0.6	14.3	0.5	0.5	5.6	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
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.2	0.0	4.1	4.2	1.1	1.8	0.0
LnGrp Delay(d),s/veh				24.7	0.0	23.1	38.5	5.2	5.2	28.5	3.1	0.0
LnGrp LOS				C		C	D	A	A	C	A	
Approach Vol, veh/h					56			1147			791	
Approach Delay, s/veh					24.3			5.2			5.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.5	36.0			4.1	38.4		6.1
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	3.9	10.4			2.0	5.9		3.1
Green Ext Time (p_c), s	0.0	20.6			0.0	22.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	36.1	62.0	72.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.75	2.81
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	56	1147	791
Effct. Green for Bike (s)	0.0	0.0	36.1	44.1
Cross Street Width (ft)	62.0	72.8	36.1	12.0
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	737	900
Bicycle Delay (s/bike)	0.0	0.0	19.5	14.8
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	3.06	2.40
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	9	7	963	645	7
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	41	41	94	94	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	22	7	1024	709	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1240	362	716	0	-	0
Stage 1	713	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	167	635	880	-	-	-
Stage 1	447	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	166	633	877	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	447	-	-	-	-	-
Stage 2	553	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	877	-	472	-	-
HCM Lane V/C Ratio	0.008	-	0.067	-	-
HCM Control Delay (s)	9.1	-	13.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	16	0	4	19	1	54	5	740	82	76	676	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	0	8	30	2	84	6	841	93	87	777	10
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.64	0.64	0.64	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	0	13	137	9	129	11	1665	184	112	2061	27
Arrive On Green	0.04	0.00	0.04	0.08	0.08	0.08	0.01	0.52	0.52	0.06	0.58	0.58
Sat Flow, veh/h	1385	0	346	1668	111	1572	1774	3206	354	1774	3577	46
Grp Volume(v), veh/h	40	0	0	32	0	84	6	464	470	87	384	403
Grp Sat Flow(s),veh/h/ln	1731	0	0	1779	0	1572	1774	1770	1790	1774	1770	1853
Q Serve(g_s), s	1.3	0.0	0.0	1.0	0.0	2.9	0.2	9.7	9.7	2.7	6.7	6.7
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.0	0.0	2.9	0.2	9.7	9.7	2.7	6.7	6.7
Prop In Lane	0.80		0.20	0.94		1.00	1.00		0.20	1.00		0.02
Lane Grp Cap(c), veh/h	63	0	0	147	0	129	11	919	930	112	1020	1068
V/C Ratio(X)	0.64	0.00	0.00	0.22	0.00	0.65	0.53	0.51	0.51	0.77	0.38	0.38
Avail Cap(c_a), veh/h	791	0	0	813	0	718	623	1244	1258	623	1244	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	0.0	24.4	0.0	25.3	28.2	8.9	8.9	26.3	6.5	6.5
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.3	0.0	2.0	13.7	0.6	0.6	4.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.0	1.3	0.1	4.8	4.9	1.5	3.3	3.4
LnGrp Delay(d),s/veh	31.0	0.0	0.0	24.7	0.0	27.4	41.8	9.5	9.5	30.5	6.9	6.8
LnGrp LOS	C			C		C	D	A	A	C	A	A
Approach Vol, veh/h		40			116			940			874	
Approach Delay, s/veh		31.0			26.6			9.7			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	34.6		6.1	4.4	37.8		8.7
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	11.7		3.3	2.2	8.7		4.9
Green Ext Time (p_c), s	0.1	17.8		0.1	0.0	19.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.04	2.72	2.74
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	40	116	940	874
Effct. Green for Bike (s)	7.7	8.6	35.6	44.9
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	119	133	552	696
Bicycle Delay (s/bike)	57.0	56.2	33.8	27.4
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	2.57	2.70	2.91	2.67
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	1	50	16	1	12	42	641	84	41	694	18
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	81	81	81	81	81	81	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	1	68	20	1	15	52	791	104	46	771	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1372	1871	398	1424	1829	450	791	0	0	895	0	0
Stage 1	872	872	-	947	947	-	-	-	-	-	-	-
Stage 2	500	999	-	477	882	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	105	71	601	96	76	556	825	-	-	754	-	-
Stage 1	312	366	-	281	338	-	-	-	-	-	-	-
Stage 2	521	319	-	538	362	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	91	62	600	76	67	555	824	-	-	753	-	-
Mov Cap-2 Maneuver	91	62	-	76	67	-	-	-	-	-	-	-
Stage 1	292	344	-	263	317	-	-	-	-	-	-	-
Stage 2	472	299	-	446	340	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.4	48.8	0.5	0.5
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	824	-	-	88	600	117	753	-	-
HCM Lane V/C Ratio	0.063	-	-	0.23	0.113	0.306	0.06	-	-
HCM Control Delay (s)	9.7	-	-	57.7	11.8	48.8	10.1	-	-
HCM Lane LOS	A	-	-	F	B	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.4	1.2	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	86	0	49	1	695	10	10	804	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				148	0	84	1	739	11	10	829	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.58	0.58	0.58	0.94	0.94	0.94	0.97	0.97	0.92
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				221	0	197	4	2041	30	19	2058	0
Arrive On Green				0.12	0.00	0.12	0.00	0.57	0.57	0.01	0.58	0.00
Sat Flow, veh/h				1774	0	1583	1774	3568	53	1774	3632	0
Grp Volume(v), veh/h				148	0	84	1	366	384	10	829	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1851	1774	1770	0
Q Serve(g_s), s				3.5	0.0	2.2	0.0	5.0	5.0	0.2	5.7	0.0
Cycle Q Clear(g_c), s				3.5	0.0	2.2	0.0	5.0	5.0	0.2	5.7	0.0
Prop In Lane				1.00		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				221	0	197	4	1013	1059	19	2058	0
V/C Ratio(X)				0.67	0.00	0.43	0.25	0.36	0.36	0.54	0.40	0.00
Avail Cap(c_a), veh/h				999	0	891	799	1594	1667	799	3188	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				18.6	0.0	18.0	22.1	5.1	5.1	21.9	5.1	0.0
Incr Delay (d2), s/veh				1.3	0.0	0.5	11.6	0.3	0.3	8.7	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
%ile BackOfQ(50%),veh/ln				1.8	0.0	1.0	0.0	2.4	2.5	0.2	2.7	0.0
LnGrp Delay(d),s/veh				19.9	0.0	18.5	33.8	5.4	5.4	30.6	5.3	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					232			751			839	
Approach Delay, s/veh					19.4			5.5			5.6	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.5	30.4			4.0	30.8		9.5
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	2.2	7.0			2.0	7.7		5.5
Green Ext Time (p_c), s	0.0	18.4			0.0	18.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.1	36.1	62.0	73.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.71	2.78
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	232	751	839
Effct. Green for Bike (s)	0.0	0.0	22.5	22.7
Cross Street Width (ft)	62.0	73.0	36.1	12.1
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	459	463
Bicycle Delay (s/bike)	0.0	0.0	29.1	28.9
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	2.73	2.44
Bicycle LOS			B	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	2	6	717	928	3
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	88	88	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	5	7	815	1067	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1489	542	1070	0	-	0
Stage 1	1068	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	115	485	647	-	-	-
Stage 1	291	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	114	482	643	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	291	-	-	-	-	-
Stage 2	623	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	643	-	348	-	-
HCM Lane V/C Ratio	0.011	-	0.023	-	-
HCM Control Delay (s)	10.7	-	15.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	0	5	79	1	136	8	724	20	54	785	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	0	10	113	1	194	9	787	22	64	924	13
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	30	293	3	259	16	1676	47	81	1835	26
Arrive On Green	0.04	0.00	0.04	0.17	0.17	0.17	0.01	0.48	0.48	0.05	0.51	0.51
Sat Flow, veh/h	826	0	826	1759	16	1557	1774	3512	98	1774	3571	50
Grp Volume(v), veh/h	20	0	0	114	0	194	9	396	413	64	458	479
Grp Sat Flow(s),veh/h/ln	1653	0	0	1775	0	1557	1774	1770	1841	1774	1770	1852
Q Serve(g_s), s	0.7	0.0	0.0	3.5	0.0	7.3	0.3	9.3	9.3	2.2	10.5	10.5
Cycle Q Clear(g_c), s	0.7	0.0	0.0	3.5	0.0	7.3	0.3	9.3	9.3	2.2	10.5	10.5
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	60	0	0	295	0	259	16	844	878	81	909	952
V/C Ratio(X)	0.34	0.00	0.00	0.39	0.00	0.75	0.55	0.47	0.47	0.79	0.50	0.50
Avail Cap(c_a), veh/h	694	0	0	745	0	654	573	1143	1190	573	1143	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	0.0	23.0	0.0	24.6	30.5	10.9	10.9	29.2	9.9	9.9
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	1.6	10.1	0.6	0.6	6.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.8	0.0	3.3	0.2	4.7	4.8	1.2	5.2	5.5
LnGrp Delay(d),s/veh	30.3	0.0	0.0	23.3	0.0	26.2	40.7	11.5	11.5	35.3	10.5	10.5
LnGrp LOS	C			C		C	D	B	B	D	B	B
Approach Vol, veh/h		20			308			818			1001	
Approach Delay, s/veh		30.3			25.1			11.8			12.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	34.5		6.2	4.6	36.8		14.3
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.2	11.3		2.7	2.3	12.5		9.3
Green Ext Time (p_c), s	0.1	18.2		0.0	0.0	17.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.0
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.07	2.75	2.78
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	20	308	818	1001
Effct. Green for Bike (s)	7.9	11.6	27.3	32.7
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	122	180	423	507
Bicycle Delay (s/bike)	56.8	53.4	40.1	35.9
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.54	3.02	2.81	2.77
Bicycle LOS	B	C	C	C

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	9	2	30	39	0	23	60	724	44	44	790	19
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	80	80	80	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	35	48	0	28	75	905	55	50	898	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1612	2119	476	1633	2102	496	919	0	0	960	0	0
Stage 1	1009	1009	-	1083	1083	-	-	-	-	-	-	-
Stage 2	603	1110	-	550	1019	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	69	50	535	67	51	519	738	-	-	712	-	-
Stage 1	257	316	-	232	292	-	-	-	-	-	-	-
Stage 2	453	283	-	487	313	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	56	42	528	52	42	512	728	-	-	703	-	-
Mov Cap-2 Maneuver	56	42	-	52	42	-	-	-	-	-	-	-
Stage 1	231	294	-	208	262	-	-	-	-	-	-	-
Stage 2	379	254	-	413	291	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.1	186.3	0.8	0.5
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	728	-	-	53	528	78	703	-	-
HCM Lane V/C Ratio	0.103	-	-	0.244	0.067	0.969	0.071	-	-
HCM Control Delay (s)	10.5	-	-	93.6	12.3	186.3	10.5	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.2	5.2	0.2	-	-

Appendix F – Level of Service Worksheets: Background plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	17	0	9	1	855	108	65	654	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				40	0	21	1	1030	130	73	735	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.43	0.43	0.43	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				82	0	73	4	2013	254	92	2439	0
Arrive On Green				0.05	0.00	0.05	0.00	0.64	0.64	0.05	0.69	0.00
Sat Flow, veh/h				1774	0	1583	1774	3153	398	1774	3632	0
Grp Volume(v), veh/h				40	0	21	1	578	582	73	735	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1781	1774	1770	0
Q Serve(g_s), s				1.1	0.0	0.6	0.0	8.6	8.7	2.0	4.0	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.6	0.0	8.6	8.7	2.0	4.0	0.0
Prop In Lane				1.00		1.00	1.00		0.22	1.00		0.00
Lane Grp Cap(c), veh/h				82	0	73	4	1130	1137	92	2439	0
V/C Ratio(X)				0.49	0.00	0.29	0.28	0.51	0.51	0.79	0.30	0.00
Avail Cap(c_a), veh/h				900	0	803	720	1436	1446	720	2872	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.9	0.0	22.7	24.6	4.8	4.8	23.1	3.0	0.0
Incr Delay (d2), s/veh				1.7	0.0	0.8	14.7	0.5	0.5	5.7	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
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.3	0.0	4.3	4.4	1.1	2.0	0.0
LnGrp Delay(d),s/veh				24.6	0.0	23.5	39.3	5.3	5.3	28.8	3.1	0.0
LnGrp LOS				C		C	D	A	A	C	A	
Approach Vol, veh/h					61			1161			808	
Approach Delay, s/veh					24.3			5.3			5.4	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.6	36.5			4.1	39.0		6.3
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	4.0	10.7			2.0	6.0		3.1
Green Ext Time (p_c), s	0.0	20.8			0.0	23.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.0	36.1	62.0	73.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.03	2.75	2.82
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	61	1161	808
Effct. Green for Bike (s)	0.0	0.0	36.5	44.7
Cross Street Width (ft)	62.0	73.1	36.1	12.0
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	745	912
Bicycle Delay (s/bike)	0.0	0.0	19.3	14.5
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	3.07	2.41
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	16	18	15	969	651	16
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	41	41	94	94	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	44	16	1031	715	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1271	370	733	0	-	0
Stage 1	724	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	160	627	868	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	157	625	865	-	-	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	865	-	406	-	-
HCM Lane V/C Ratio	0.018	-	0.204	-	-
HCM Control Delay (s)	9.2	-	16.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	16	0	4	21	1	54	5	756	84	76	692	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	0	8	33	2	84	6	859	95	87	795	10
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.64	0.64	0.64	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	0	13	139	8	131	11	1676	185	112	2075	26
Arrive On Green	0.04	0.00	0.04	0.08	0.08	0.08	0.01	0.52	0.52	0.06	0.58	0.58
Sat Flow, veh/h	1385	0	346	1677	102	1572	1774	3206	355	1774	3578	45
Grp Volume(v), veh/h	40	0	0	35	0	84	6	474	480	87	393	412
Grp Sat Flow(s),veh/h/ln	1731	0	0	1779	0	1572	1774	1770	1790	1774	1770	1854
Q Serve(g_s), s	1.3	0.0	0.0	1.1	0.0	3.0	0.2	10.1	10.1	2.8	6.9	6.9
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.1	0.0	3.0	0.2	10.1	10.1	2.8	6.9	6.9
Prop In Lane	0.80		0.20	0.94		1.00	1.00		0.20	1.00		0.02
Lane Grp Cap(c), veh/h	63	0	0	148	0	131	11	925	936	112	1026	1075
V/C Ratio(X)	0.64	0.00	0.00	0.24	0.00	0.64	0.53	0.51	0.51	0.77	0.38	0.38
Avail Cap(c_a), veh/h	780	0	0	801	0	708	615	1227	1241	615	1227	1285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	0.0	24.7	0.0	25.6	28.6	9.0	9.0	26.6	6.5	6.6
Incr Delay (d2), s/veh	4.0	0.0	0.0	0.3	0.0	2.0	13.7	0.6	0.6	4.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.0	1.4	0.1	5.0	5.1	1.5	3.4	3.5
LnGrp Delay(d),s/veh	31.4	0.0	0.0	25.1	0.0	27.6	42.3	9.6	9.6	30.8	6.9	6.9
LnGrp LOS	C			C		C	D	A	A	C	A	A
Approach Vol, veh/h		40			119			960			892	
Approach Delay, s/veh		31.4			26.9			9.8			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	35.2		6.1	4.4	38.5		8.8
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.8	12.1		3.3	2.2	8.9		5.0
Green Ext Time (p_c), s	0.1	18.1		0.1	0.0	19.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.05	2.73	2.75
Pedestrian Crosswalk LOS	A	B	B	B

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	40	119	960	892
Effct. Green for Bike (s)	7.7	8.6	36.2	45.5
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	119	133	561	705
Bicycle Delay (s/bike)	57.0	56.2	33.4	27.0
Bicycle Compliance	Poor	Poor	Poor	Fair
Bicycle LOS Score	2.57	2.70	2.93	2.68
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	1	50	18	1	12	42	655	86	41	708	18
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	81	81	81	81	81	81	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	1	68	22	1	15	52	809	106	46	787	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1397	1907	405	1450	1863	459	807	0	0	915	0	0
Stage 1	888	888	-	965	965	-	-	-	-	-	-	-
Stage 2	509	1019	-	485	898	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	101	68	595	92	72	549	814	-	-	741	-	-
Stage 1	305	360	-	274	331	-	-	-	-	-	-	-
Stage 2	515	313	-	532	356	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	88	60	594	73	63	548	813	-	-	740	-	-
Mov Cap-2 Maneuver	88	60	-	73	63	-	-	-	-	-	-	-
Stage 1	285	338	-	256	310	-	-	-	-	-	-	-
Stage 2	466	293	-	440	334	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.9	54.9	0.5	0.5
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	813	-	-	85	594	109	740	-	-
HCM Lane V/C Ratio	0.064	-	-	0.238	0.114	0.351	0.062	-	-
HCM Control Delay (s)	9.7	-	-	60.1	11.8	54.9	10.2	-	-
HCM Lane LOS	A	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.4	1.4	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	86	0	51	1	710	10	11	814	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				148	0	88	1	755	11	11	839	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.58	0.58	0.58	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				221	0	198	4	2050	30	20	2069	0
Arrive On Green				0.12	0.00	0.12	0.00	0.57	0.57	0.01	0.58	0.00
Sat Flow, veh/h				1774	0	1583	1774	3569	52	1774	3632	0
Grp Volume(v), veh/h				148	0	88	1	374	392	11	839	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1851	1774	1770	0
Q Serve(g_s), s				3.6	0.0	2.3	0.0	5.1	5.1	0.3	5.8	0.0
Cycle Q Clear(g_c), s				3.6	0.0	2.3	0.0	5.1	5.1	0.3	5.8	0.0
Prop In Lane				1.00		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				221	0	198	4	1016	1063	20	2069	0
V/C Ratio(X)				0.67	0.00	0.45	0.25	0.37	0.37	0.54	0.41	0.00
Avail Cap(c_a), veh/h				987	0	881	790	1576	1649	790	3152	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				18.8	0.0	18.2	22.4	5.2	5.2	22.1	5.1	0.0
Incr Delay (d2), s/veh				1.3	0.0	0.6	11.9	0.3	0.3	8.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	1.0	0.0	2.6	2.7	0.2	2.8	0.0
LnGrp Delay(d),s/veh				20.1	0.0	18.8	34.3	5.5	5.5	30.2	5.3	0.0
LnGrp LOS				C		B	C	A	A	C	A	
Approach Vol, veh/h					236			767			850	
Approach Delay, s/veh					19.6			5.5			5.6	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.5	30.8			4.0	31.3		9.6
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0			20.0	40.0		25.0
Max Q Clear Time (g_c+I1), s	2.3	7.1			2.0	7.8		5.6
Green Ext Time (p_c), s	0.0	18.7			0.0	18.4		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	11.9	36.1	62.0	72.7
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	49.0	49.0	49.0	49.0
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.44	2.02	2.71	2.79
Pedestrian Crosswalk LOS	A	B	B	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	236	767	850
Effct. Green for Bike (s)	0.0	0.0	22.6	22.7
Cross Street Width (ft)	62.0	72.7	36.1	11.9
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	461	463
Bicycle Delay (s/bike)	0.0	0.0	29.0	28.9
Bicycle Compliance			Fair	Fair
Bicycle LOS Score	0.00	0.00	2.74	2.44
Bicycle LOS			B	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	9	8	17	723	933	15
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	88	88	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	21	19	822	1072	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1530	552	1090	0	-	0
Stage 1	1081	-	-	-	-	-
Stage 2	449	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	108	477	636	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	105	474	632	-	-	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	287	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.6	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	632	-	291	-	-
HCM Lane V/C Ratio	0.031	-	0.154	-	-
HCM Control Delay (s)	10.9	-	19.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	0	5	81	1	136	8	736	21	54	804	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	0	10	116	1	194	9	800	23	64	946	13
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.92	0.92	0.92	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	0	30	292	3	258	16	1686	48	82	1848	25
Arrive On Green	0.04	0.00	0.04	0.17	0.17	0.17	0.01	0.48	0.48	0.05	0.52	0.52
Sat Flow, veh/h	826	0	826	1760	15	1557	1774	3509	101	1774	3573	49
Grp Volume(v), veh/h	20	0	0	117	0	194	9	403	420	64	469	490
Grp Sat Flow(s),veh/h/ln	1652	0	0	1775	0	1557	1774	1770	1840	1774	1770	1852
Q Serve(g_s), s	0.7	0.0	0.0	3.7	0.0	7.4	0.3	9.6	9.6	2.2	10.9	10.9
Cycle Q Clear(g_c), s	0.7	0.0	0.0	3.7	0.0	7.4	0.3	9.6	9.6	2.2	10.9	10.9
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	59	0	0	295	0	258	16	850	884	82	915	958
V/C Ratio(X)	0.34	0.00	0.00	0.40	0.00	0.75	0.55	0.47	0.47	0.78	0.51	0.51
Avail Cap(c_a), veh/h	686	0	0	737	0	646	567	1131	1176	567	1131	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	0.0	23.3	0.0	24.9	30.9	10.9	10.9	29.6	9.9	9.9
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	1.7	10.2	0.6	0.6	6.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	1.8	0.0	3.3	0.2	4.7	4.9	1.2	5.4	5.6
LnGrp Delay(d),s/veh	30.7	0.0	0.0	23.6	0.0	26.5	41.0	11.5	11.5	35.6	10.6	10.5
LnGrp LOS	C			C		C	D	B	B	D	B	B
Approach Vol, veh/h		20			311			832			1023	
Approach Delay, s/veh		30.7			25.4			11.8			12.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	35.1		6.3	4.6	37.4		14.4
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		26.0	20.0	40.0		26.0
Max Q Clear Time (g_c+I1), s	4.2	11.6		2.7	2.3	12.9		9.4
Green Ext Time (p_c), s	0.1	18.5		0.0	0.0	17.9		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	64.5	64.5	64.5	64.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.76	2.07	2.76	2.79
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	20	311	832	1023
Effct. Green for Bike (s)	7.9	11.7	27.8	33.2
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	122	181	431	515
Bicycle Delay (s/bike)	56.8	53.3	39.7	35.6
Bicycle Compliance	Poor	Poor	Poor	Poor
Bicycle LOS Score	2.54	3.02	2.82	2.79
Bicycle LOS	B	C	C	C

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	9	2	30	41	0	23	60	735	45	44	807	19
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	82	82	82	80	80	80	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	35	50	0	28	75	919	56	50	917	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1637	2153	485	1657	2136	504	939	0	0	975	0	0
Stage 1	1028	1028	-	1097	1097	-	-	-	-	-	-	-
Stage 2	609	1125	-	560	1039	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	67	47	528	64	49	513	726	-	-	703	-	-
Stage 1	251	310	-	227	287	-	-	-	-	-	-	-
Stage 2	449	278	-	480	306	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	54	39	521	~ 49	41	506	716	-	-	694	-	-
Mov Cap-2 Maneuver	54	39	-	~ 49	41	-	-	-	-	-	-	-
Stage 1	225	288	-	203	257	-	-	-	-	-	-	-
Stage 2	375	249	-	406	284	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36	224.7	0.8	0.5
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	716	-	-	50	521	73	694	-	-
HCM Lane V/C Ratio	0.105	-	-	0.259	0.068	1.069	0.072	-	-
HCM Control Delay (s)	10.6	-	-	100.5	12.4	224.7	10.6	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	0.2	5.7	0.2	-	-

Notes

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

Appendix G – Level of Service Worksheets: Cumulative 2035 Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	21	0	9	1	987	132	77	743	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				23	0	10	1	1073	143	84	808	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				55	0	50	5	1695	226	112	2137	0
Arrive On Green				0.03	0.00	0.03	0.00	0.54	0.54	0.06	0.60	0.00
Sat Flow, veh/h				1774	0	1583	1774	3130	416	1774	3632	0
Grp Volume(v), veh/h				23	0	10	1	606	610	84	808	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1777	1774	1770	0
Q Serve(g_s), s				0.5	0.0	0.2	0.0	8.5	8.6	1.7	4.2	0.0
Cycle Q Clear(g_c), s				0.5	0.0	0.2	0.0	8.5	8.6	1.7	4.2	0.0
Prop In Lane				1.00		1.00	1.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h				55	0	50	5	958	962	112	2137	0
V/C Ratio(X)				0.41	0.00	0.20	0.20	0.63	0.63	0.75	0.38	0.00
Avail Cap(c_a), veh/h				1092	0	975	199	1040	1045	199	2137	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				17.0	0.0	16.9	17.8	5.7	5.7	16.5	3.6	0.0
Incr Delay (d2), s/veh				1.8	0.0	0.7	7.2	1.4	1.4	3.7	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
%ile BackOfQ(50%),veh/ln				0.2	0.0	0.1	0.0	4.4	4.4	0.9	2.1	0.0
LnGrp Delay(d),s/veh				18.8	0.0	17.6	25.0	7.1	7.1	20.1	3.8	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					33			1217			892	
Approach Delay, s/veh					18.5			7.1			5.3	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.3	24.3			4.0	26.6		5.1
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	21.0			4.0	21.0		22.0
Max Q Clear Time (g_c+I1), s	3.7	10.6			2.0	6.2		2.5
Green Ext Time (p_c), s	0.0	8.8			0.0	12.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.1	36.1	62.0	73.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.42	2.00	2.76	2.82
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	33	1217	892
Effct. Green for Bike (s)	0.0	0.0	29.1	35.8
Cross Street Width (ft)	62.0	73.0	36.1	12.1
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	970	1193
Bicycle Delay (s/bike)	0.0	0.0	8.0	4.9
Bicycle Compliance			Good	Good
Bicycle LOS Score	0.00	0.00	3.12	2.48
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	5	11	9	1134	748	9
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	12	10	1233	813	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1454	415	823	0	-	0
Stage 1	818	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	121	586	803	-	-	-
Stage 1	394	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	119	584	800	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	394	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	800	-	414	-	-
HCM Lane V/C Ratio	0.012	-	0.042	-	-
HCM Control Delay (s)	9.6	-	14.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	0	5	23	1	66	6	868	100	93	771	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	0	5	25	1	72	7	943	109	101	838	12
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	0	9	123	5	113	13	1602	185	129	2027	29
Arrive On Green	0.03	0.00	0.03	0.07	0.07	0.07	0.01	0.50	0.50	0.07	0.57	0.57
Sat Flow, veh/h	1413	0	321	1709	68	1571	1774	3189	369	1774	3571	51
Grp Volume(v), veh/h	27	0	0	26	0	72	7	523	529	101	415	435
Grp Sat Flow(s),veh/h/ln	1734	0	0	1777	0	1571	1774	1770	1788	1774	1770	1852
Q Serve(g_s), s	0.8	0.0	0.0	0.7	0.0	2.3	0.2	10.9	10.9	2.9	6.9	6.9
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.7	0.0	2.3	0.2	10.9	10.9	2.9	6.9	6.9
Prop In Lane	0.81		0.19	0.96		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	49	0	0	128	0	113	13	889	898	129	1004	1051
V/C Ratio(X)	0.55	0.00	0.00	0.20	0.00	0.64	0.53	0.59	0.59	0.78	0.41	0.41
Avail Cap(c_a), veh/h	862	0	0	883	0	781	136	1015	1025	203	1082	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	0.0	0.0	22.9	0.0	23.6	25.9	9.2	9.2	23.9	6.4	6.4
Incr Delay (d2), s/veh	3.5	0.0	0.0	0.3	0.0	2.2	11.9	1.0	0.9	3.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.4	0.0	1.1	0.1	5.5	5.5	1.6	3.5	3.6
LnGrp Delay(d),s/veh	28.6	0.0	0.0	23.2	0.0	25.9	37.8	10.2	10.1	27.8	6.8	6.8
LnGrp LOS	C			C		C	D	B	B	C	A	A
Approach Vol, veh/h		27			98			1059			951	
Approach Delay, s/veh		28.6			25.1			10.3			9.0	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	31.3		5.5	4.4	34.7		7.8
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	6.0	30.0		26.0	4.0	32.0		26.0
Max Q Clear Time (g_c+I1), s	4.9	12.9		2.8	2.2	8.9		4.3
Green Ext Time (p_c), s	0.0	13.3		0.1	0.0	17.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	52.5	52.5	52.5	52.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.75	2.04	2.75	2.77
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	27	98	1059	951
Effct. Green for Bike (s)	7.5	8.1	35.3	46.0
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	143	154	672	876
Bicycle Delay (s/bike)	45.3	44.7	23.1	16.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.55	2.67	3.01	2.73
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	17	1	61	20	1	15	51	746	102	50	793	22
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1	66	22	1	16	55	811	111	54	862	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1500	2016	445	1517	1972	463	886	0	0	922	0	0
Stage 1	983	983	-	977	977	-	-	-	-	-	-	-
Stage 2	517	1033	-	540	995	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	84	58	561	82	62	546	760	-	-	736	-	-
Stage 1	267	325	-	269	327	-	-	-	-	-	-	-
Stage 2	509	308	-	494	321	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	71	50	560	63	53	545	759	-	-	735	-	-
Mov Cap-2 Maneuver	71	50	-	63	53	-	-	-	-	-	-	-
Stage 1	248	301	-	250	303	-	-	-	-	-	-	-
Stage 2	456	286	-	401	297	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27	63.4	0.6	0.6
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	759	-	-	69	560	99	735	-	-
HCM Lane V/C Ratio	0.073	-	-	0.284	0.118	0.395	0.074	-	-
HCM Control Delay (s)	10.1	-	-	76.6	12.3	63.4	10.3	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1	0.4	1.6	0.2	-	-

Movement	WBL	WBR	WBR2	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SER
Lane Configurations											
Volume (veh/h)	105	0	60	1	799	12	12	935	0	0	0
Number	3	18	18	5	2	12	1	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00		0.96	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	0		
Adj Flow Rate, veh/h	114	65	65	1	868	13	13	1016	0		
Adj No. of Lanes	1	1	1	1	2	0	1	2	0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	0		
Cap, veh/h	183	163	163	5	1854	28	24	1884	0		
Arrive On Green	0.10	0.10	0.10	0.00	0.52	0.52	0.01	0.53	0.00		
Sat Flow, veh/h	1774	1583	1583	1774	3567	53	1774	3632	0		
Grp Volume(v), veh/h	114	65	65	1	431	450	13	1016	0		
Grp Sat Flow(s),veh/h/ln	1774	1583	1583	1774	1770	1851	1774	1770	0		
Q Serve(g_s), s	2.2	1.4	1.4	0.0	5.5	5.5	0.3	6.7	0.0		
Cycle Q Clear(g_c), s	2.2	1.4	1.4	0.0	5.5	5.5	0.3	6.7	0.0		
Prop In Lane	1.00	1.00	1.00	1.00		0.03	1.00		0.00		
Lane Grp Cap(c), veh/h	183	163	163	5	920	962	24	1884	0		
V/C Ratio(X)	0.62	0.40	0.40	0.20	0.47	0.47	0.54	0.54	0.00		
Avail Cap(c_a), veh/h	1091	974	974	198	1039	1087	198	2078	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	15.4	15.0	15.0	17.8	5.4	5.4	17.5	5.5	0.0		
Incr Delay (d2), s/veh	1.3	0.6	0.6	7.2	0.5	0.5	6.8	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		
%ile BackOfQ(50%),veh/ln	1.1	0.6	0.6	0.0	2.8	2.9	0.2	3.3	0.0		
LnGrp Delay(d),s/veh	16.7	15.6	15.6	25.0	6.0	6.0	24.4	5.8	0.0		
LnGrp LOS	B	B	B	C	A	A	C	A			
Approach Vol, veh/h	179				882			1029			
Approach Delay, s/veh	16.3				6.0			6.1			
Approach LOS	B				A			A			

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.5	23.6			4.0	24.0		7.7
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	21.0			4.0	21.0		22.0
Max Q Clear Time (g_c+I1), s	2.3	7.5			2.0	8.7		4.2
Green Ext Time (p_c), s	0.0	11.1			0.0	10.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.9
HCM 2010 LOS	A

Approach	WB	NB	SB	SE
Crosswalk Length (ft)	36.1	62.0	72.4	12.4
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	3	5	6	1
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	0	8	6
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	35	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.99	2.75	2.82	1.42
Pedestrian Crosswalk LOS	A	C	C	A

Approach	WB	NB	SB	SE
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	179	882	1029	0
Effct. Green for Bike (s)	8.7	25.8	25.8	0.0
Cross Street Width (ft)	72.4	36.1	12.4	62.0
Through Lanes Number	1	2	2	0
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	290	860	860	0
Bicycle Delay (s/bike)	21.9	9.7	9.7	0.0
Bicycle Compliance	Fair	Good	Good	
Bicycle LOS Score	2.96	2.84	2.60	0.00
Bicycle LOS	C	C	B	

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	1	2	7	826	1086	4
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	2	8	898	1180	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1647	599	1185	0	-	0
Stage 1	1183	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	90	445	585	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	89	442	582	-	-	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.7	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	582	-	310	-	-
HCM Lane V/C Ratio	0.013	-	0.011	-	-
HCM Control Delay (s)	11.3	-	16.7	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	0	6	96	1	166	10	826	24	66	909	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	0	7	104	1	180	11	898	26	72	988	14
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	0	26	290	3	257	20	1438	42	90	1605	23
Arrive On Green	0.03	0.00	0.03	0.16	0.16	0.16	0.01	0.41	0.41	0.05	0.45	0.45
Sat Flow, veh/h	828	0	828	1758	17	1557	1774	3508	102	1774	3571	51
Grp Volume(v), veh/h	14	0	0	105	0	180	11	453	471	72	490	512
Grp Sat Flow(s),veh/h/ln	1657	0	0	1775	0	1557	1774	1770	1840	1774	1770	1852
Q Serve(g_s), s	0.4	0.0	0.0	2.6	0.0	5.4	0.3	10.1	10.1	2.0	10.5	10.5
Cycle Q Clear(g_c), s	0.4	0.0	0.0	2.6	0.0	5.4	0.3	10.1	10.1	2.0	10.5	10.5
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	53	0	0	293	0	257	20	726	754	90	795	832
V/C Ratio(X)	0.27	0.00	0.00	0.36	0.00	0.70	0.55	0.62	0.62	0.80	0.62	0.62
Avail Cap(c_a), veh/h	868	0	0	930	0	815	143	784	816	143	795	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	0.0	18.4	0.0	19.6	24.4	11.6	11.6	23.3	10.4	10.4
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.3	0.0	1.3	8.3	1.7	1.6	6.5	1.7	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	0.2	0.0	0.0	1.3	0.0	2.4	0.2	5.2	5.4	1.1	5.4	5.6
LnGrp Delay(d),s/veh	24.5	0.0	0.0	18.7	0.0	20.9	32.7	13.3	13.2	29.8	12.1	12.0
LnGrp LOS	C			B		C	C	B	B	C	B	B
Approach Vol, veh/h		14			285			935			1074	
Approach Delay, s/veh		24.5			20.1			13.5			13.2	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	25.3		5.6	4.6	27.3		12.2
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	22.0		26.0	4.0	22.0		26.0
Max Q Clear Time (g_c+I1), s	4.0	12.1		2.4	2.3	12.5		7.4
Green Ext Time (p_c), s	0.0	8.1		0.0	0.0	8.1		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.3
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	47.5	47.5	47.5	47.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.74	2.06	2.77	2.80
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	14	285	935	1074
Effct. Green for Bike (s)	7.4	9.6	24.3	32.0
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	156	202	512	674
Bicycle Delay (s/bike)	40.4	38.4	26.3	20.9
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.53	2.98	2.91	2.83
Bicycle LOS	B	C	C	C

Intersection	
Int Delay, s/veh	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	2	37	48	0	28	73	826	54	54	914	23
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	2	40	52	0	30	79	898	59	59	993	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1731	2238	525	1701	2222	494	1018	0	0	957	0	0
Stage 1	1123	1123	-	1086	1086	-	-	-	-	-	-	-
Stage 2	608	1115	-	615	1136	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	57	42	497	60	43	521	677	-	-	714	-	-
Stage 1	219	279	-	231	291	-	-	-	-	-	-	-
Stage 2	450	282	-	445	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	34	490	~ 44	35	514	668	-	-	704	-	-
Mov Cap-2 Maneuver	45	34	-	~ 44	35	-	-	-	-	-	-	-
Stage 1	193	256	-	204	257	-	-	-	-	-	-	-
Stage 2	368	249	-	366	252	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	42.2	$ 300.4	0.9	0.6
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	668	-	-	43	490	66	704	-	-
HCM Lane V/C Ratio	0.119	-	-	0.329	0.082	1.252	0.083	-	-
HCM Control Delay (s)	11.1	-	-	125.3	13	$ 300.4	10.6	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.1	0.3	6.7	0.3	-	-

Notes

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

Appendix H – Level of Service Worksheets: Cumulative 2035 plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	21	0	11	1	999	132	79	756	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				23	0	12	1	1086	143	86	822	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				58	0	52	5	1695	223	114	2136	0
Arrive On Green				0.03	0.00	0.03	0.00	0.54	0.54	0.06	0.60	0.00
Sat Flow, veh/h				1774	0	1583	1774	3136	412	1774	3632	0
Grp Volume(v), veh/h				23	0	12	1	612	617	86	822	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1778	1774	1770	0
Q Serve(g_s), s				0.5	0.0	0.3	0.0	8.7	8.8	1.7	4.3	0.0
Cycle Q Clear(g_c), s				0.5	0.0	0.3	0.0	8.7	8.8	1.7	4.3	0.0
Prop In Lane				1.00		1.00	1.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h				58	0	52	5	957	961	114	2136	0
V/C Ratio(X)				0.39	0.00	0.23	0.20	0.64	0.64	0.76	0.38	0.00
Avail Cap(c_a), veh/h				1088	0	971	198	1036	1041	198	2136	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				17.0	0.0	16.9	17.9	5.8	5.8	16.5	3.7	0.0
Incr Delay (d2), s/veh				1.6	0.0	0.8	7.2	1.4	1.5	3.8	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
%ile BackOfQ(50%),veh/ln				0.2	0.0	0.1	0.0	4.5	4.5	0.9	2.1	0.0
LnGrp Delay(d),s/veh				18.6	0.0	17.7	25.1	7.2	7.2	20.3	3.8	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					35			1230			908	
Approach Delay, s/veh					18.3			7.3			5.4	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.3	24.4			4.0	26.7		5.2
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	21.0			4.0	21.0		22.0
Max Q Clear Time (g_c+I1), s	3.7	10.8			2.0	6.3		2.5
Green Ext Time (p_c), s	0.0	8.6			0.0	12.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.2	36.1	62.0	73.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.42	2.01	2.77	2.83
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	35	1230	908
Effct. Green for Bike (s)	0.0	0.0	29.1	35.9
Cross Street Width (ft)	62.0	73.1	36.1	12.2
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	970	1197
Bicycle Delay (s/bike)	0.0	0.0	8.0	4.8
Bicycle Compliance			Good	Good
Bicycle LOS Score	0.00	0.00	3.13	2.50
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	17	20	17	1140	754	18
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	22	18	1239	820	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1486	424	839	0	-	0
Stage 1	829	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	115	579	791	-	-	-
Stage 1	389	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	112	577	788	-	-	-
Mov Cap-2 Maneuver	244	-	-	-	-	-
Stage 1	389	-	-	-	-	-
Stage 2	466	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	788	-	355	-	-
HCM Lane V/C Ratio	0.023	-	0.113	-	-
HCM Control Delay (s)	9.7	-	16.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	0	5	25	1	66	6	884	102	93	787	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	0	5	27	1	72	7	961	111	101	855	12
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	0	9	124	5	114	13	1608	186	129	2034	29
Arrive On Green	0.03	0.00	0.03	0.07	0.07	0.07	0.01	0.50	0.50	0.07	0.57	0.57
Sat Flow, veh/h	1413	0	321	1714	63	1571	1774	3189	368	1774	3572	50
Grp Volume(v), veh/h	27	0	0	28	0	72	7	533	539	101	424	443
Grp Sat Flow(s),veh/h/ln	1734	0	0	1777	0	1571	1774	1770	1788	1774	1770	1852
Q Serve(g_s), s	0.8	0.0	0.0	0.8	0.0	2.3	0.2	11.3	11.3	3.0	7.1	7.1
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.8	0.0	2.3	0.2	11.3	11.3	3.0	7.1	7.1
Prop In Lane	0.81		0.19	0.96		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	49	0	0	129	0	114	13	892	901	129	1008	1055
V/C Ratio(X)	0.55	0.00	0.00	0.22	0.00	0.63	0.53	0.60	0.60	0.78	0.42	0.42
Avail Cap(c_a), veh/h	855	0	0	876	0	775	135	1007	1017	202	1074	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	0.0	23.0	0.0	23.8	26.1	9.3	9.3	24.0	6.4	6.4
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.3	0.0	2.2	11.9	1.0	1.0	3.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.4	0.0	1.1	0.1	5.7	5.8	1.6	3.5	3.7
LnGrp Delay(d),s/veh	28.8	0.0	0.0	23.4	0.0	25.9	38.0	10.3	10.3	28.0	6.8	6.8
LnGrp LOS	C			C		C	D	B	B	C	A	A
Approach Vol, veh/h		27			100			1079			968	
Approach Delay, s/veh		28.8			25.2			10.5			9.0	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	31.6		5.5	4.4	35.0		7.8
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	6.0	30.0		26.0	4.0	32.0		26.0
Max Q Clear Time (g_c+I1), s	5.0	13.3		2.8	2.2	9.1		4.3
Green Ext Time (p_c), s	0.0	13.3		0.1	0.0	17.1		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	52.5	52.5	52.5	52.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.75	2.04	2.76	2.78
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	27	100	1079	968
Effct. Green for Bike (s)	7.5	8.1	35.2	46.0
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	143	154	670	876
Bicycle Delay (s/bike)	45.3	44.7	23.2	16.6
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.55	2.67	3.03	2.74
Bicycle LOS	B	B	C	B

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	17	1	61	22	1	15	51	760	104	50	807	22
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	2	2	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	1	66	24	1	16	55	826	113	54	877	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1522	2048	453	1541	2003	472	901	0	0	939	0	0
Stage 1	998	998	-	993	993	-	-	-	-	-	-	-
Stage 2	524	1050	-	548	1010	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	81	55	554	79	59	538	750	-	-	726	-	-
Stage 1	261	320	-	263	322	-	-	-	-	-	-	-
Stage 2	504	302	-	488	316	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	69	47	553	61	51	537	749	-	-	725	-	-
Mov Cap-2 Maneuver	69	47	-	61	51	-	-	-	-	-	-	-
Stage 1	242	296	-	244	298	-	-	-	-	-	-	-
Stage 2	450	280	-	395	292	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.7	71.5	0.6	0.6
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	749	-	-	67	553	93	725	-	-
HCM Lane V/C Ratio	0.074	-	-	0.292	0.12	0.444	0.075	-	-
HCM Control Delay (s)	10.2	-	-	79.5	12.4	71.5	10.4	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	0.4	1.9	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	105	0	62	1	814	12	13	945	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	0	1863	1863	1863	1900	1863	1863	0
Adj Flow Rate, veh/h				114	0	67	1	885	13	14	1027	0
Adj No. of Lanes				1	0	1	1	2	0	1	2	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	2	2	2	0
Cap, veh/h				184	0	164	5	1858	27	26	1890	0
Arrive On Green				0.10	0.00	0.10	0.00	0.52	0.52	0.01	0.53	0.00
Sat Flow, veh/h				1774	0	1583	1774	3568	52	1774	3632	0
Grp Volume(v), veh/h				114	0	67	1	439	459	14	1027	0
Grp Sat Flow(s),veh/h/ln				1774	0	1583	1774	1770	1851	1774	1770	0
Q Serve(g_s), s				2.2	0.0	1.4	0.0	5.7	5.7	0.3	6.9	0.0
Cycle Q Clear(g_c), s				2.2	0.0	1.4	0.0	5.7	5.7	0.3	6.9	0.0
Prop In Lane				1.00		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h				184	0	164	5	921	964	26	1890	0
V/C Ratio(X)				0.62	0.00	0.41	0.20	0.48	0.48	0.54	0.54	0.00
Avail Cap(c_a), veh/h				1085	0	968	197	1033	1080	197	2065	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				15.5	0.0	15.1	17.9	5.5	5.5	17.6	5.5	0.0
Incr Delay (d2), s/veh				1.3	0.0	0.6	7.3	0.5	0.5	6.5	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
%ile BackOfQ(50%),veh/ln				1.1	0.0	0.6	0.0	2.8	2.9	0.2	3.4	0.0
LnGrp Delay(d),s/veh				16.7	0.0	15.7	25.2	6.0	6.0	24.1	5.9	0.0
LnGrp LOS				B		B	C	A	A	C	A	
Approach Vol, veh/h					181			899			1041	
Approach Delay, s/veh					16.3			6.1			6.1	
Approach LOS					B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	4.5	23.7			4.0	24.2		7.7
Change Period (Y+Rc), s	4.0	5.0			4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	21.0			4.0	21.0		22.0
Max Q Clear Time (g_c+I1), s	2.3	7.7			2.0	8.9		4.2
Green Ext Time (p_c), s	0.0	11.0			0.0	10.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	12.1	36.1	62.0	72.8
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	1	3	5	6
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	0	0
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	35	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.42	1.99	2.76	2.82
Pedestrian Crosswalk LOS	A	A	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	0	181	899	1041
Effct. Green for Bike (s)	0.0	0.0	26.0	26.0
Cross Street Width (ft)	62.0	72.8	36.1	12.1
Through Lanes Number	0	0	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	0	0	867	867
Bicycle Delay (s/bike)	0.0	0.0	9.6	9.6
Bicycle Compliance			Good	Good
Bicycle LOS Score	0.00	0.00	2.85	2.60
Bicycle LOS			C	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	9	8	18	832	1091	16
Conflicting Peds, #/hr	0	0	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	9	20	904	1186	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1686	609	1203	0	-	0
Stage 1	1195	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	85	438	576	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	82	435	573	-	-	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	573	-	257	-	-
HCM Lane V/C Ratio	0.034	-	0.072	-	-
HCM Control Delay (s)	11.5	-	20.1	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	0	6	98	1	166	10	838	25	66	928	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	0	7	107	1	180	11	911	27	72	1009	14
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	0	26	291	3	257	20	1438	43	90	1606	22
Arrive On Green	0.03	0.00	0.03	0.17	0.17	0.17	0.01	0.41	0.41	0.05	0.45	0.45
Sat Flow, veh/h	828	0	828	1758	16	1557	1774	3505	104	1774	3572	50
Grp Volume(v), veh/h	14	0	0	108	0	180	11	460	478	72	500	523
Grp Sat Flow(s),veh/h/ln	1657	0	0	1775	0	1557	1774	1770	1839	1774	1770	1852
Q Serve(g_s), s	0.4	0.0	0.0	2.7	0.0	5.4	0.3	10.3	10.3	2.0	10.8	10.8
Cycle Q Clear(g_c), s	0.4	0.0	0.0	2.7	0.0	5.4	0.3	10.3	10.3	2.0	10.8	10.8
Prop In Lane	0.50		0.50	0.99		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	53	0	0	293	0	257	20	726	755	90	796	833
V/C Ratio(X)	0.27	0.00	0.00	0.37	0.00	0.70	0.55	0.63	0.63	0.80	0.63	0.63
Avail Cap(c_a), veh/h	867	0	0	928	0	814	143	783	814	143	796	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	0.0	18.4	0.0	19.6	24.4	11.7	11.7	23.3	10.5	10.5
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.3	0.0	1.3	8.3	1.8	1.7	6.6	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.3	0.0	2.4	0.2	5.3	5.5	1.1	5.5	5.8
LnGrp Delay(d),s/veh	24.5	0.0	0.0	18.7	0.0	20.9	32.8	13.5	13.4	30.0	12.3	12.2
LnGrp LOS	C			B		C	C	B	B	C	B	B
Approach Vol, veh/h		14			288			949			1095	
Approach Delay, s/veh		24.5			20.1			13.7			13.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	25.4		5.6	4.6	27.4		12.2
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	4.0	22.0		26.0	4.0	22.0		26.0
Max Q Clear Time (g_c+I1), s	4.0	12.3		2.4	2.3	12.8		7.4
Green Ext Time (p_c), s	0.0	7.9		0.0	0.0	7.9		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	25.2	37.6	62.0	62.0
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	5	5
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	6	2	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	35	35
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	47.5	47.5	47.5	47.5
Pedestrian Compliance Code	Poor	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.74	2.06	2.78	2.81
Pedestrian Crosswalk LOS	A	B	C	C

Approach	EB	WB	NB	SB
Bicycle Flow Rate (bike/h)	0	0	0	0
Total Flow Rate (veh/h)	14	288	949	1095
Effct. Green for Bike (s)	7.4	9.6	24.1	31.9
Cross Street Width (ft)	62.0	62.0	37.6	25.2
Through Lanes Number	1	1	2	2
Through Lane Width (ft)	12.0	12.0	12.0	12.0
Bicycle Lane Width (ft)	0.0	0.0	0.0	0.0
Paved Shoulder Width (ft)	0.0	0.0	0.0	0.0
Curb Is Present?	No	No	No	No
On Street Parking?	No	No	No	No
Bicycle Lane Capacity (bike/h)	156	202	507	672
Bicycle Delay (s/bike)	40.4	38.4	26.5	21.0
Bicycle Compliance	Poor	Poor	Fair	Fair
Bicycle LOS Score	2.53	2.98	2.92	2.85
Bicycle LOS	B	C	C	C

Intersection	
Int Delay, s/veh	14.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	2	37	50	0	28	73	837	55	54	931	23
Conflicting Peds, #/hr	0	0	0	0	0	0	10	0	16	16	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	60	-	-	-	100	-	-	90	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	2	40	54	0	30	79	910	60	59	1012	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1756	2270	534	1722	2252	501	1037	0	0	970	0	0
Stage 1	1142	1142	-	1098	1098	-	-	-	-	-	-	-
Stage 2	614	1128	-	624	1154	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	54	40	491	57	41	515	666	-	-	706	-	-
Stage 1	213	273	-	227	287	-	-	-	-	-	-	-
Stage 2	446	278	-	440	270	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	43	32	484	~ 42	33	508	657	-	-	697	-	-
Mov Cap-2 Maneuver	43	32	-	~ 42	33	-	-	-	-	-	-	-
Stage 1	187	250	-	200	252	-	-	-	-	-	-	-
Stage 2	364	245	-	361	247	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	44.4	$ 341.6	0.8	0.6
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	657	-	-	41	484	63	697	-	-
HCM Lane V/C Ratio	0.121	-	-	0.345	0.083	1.346	0.084	-	-
HCM Control Delay (s)	11.2	-	-	133.4	13.1	$ 341.6	10.6	-	-
HCM Lane LOS	B	-	-	F	B	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.2	0.3	7.2	0.3	-	-

Notes

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

Appendix I – Approved and Pending Project List

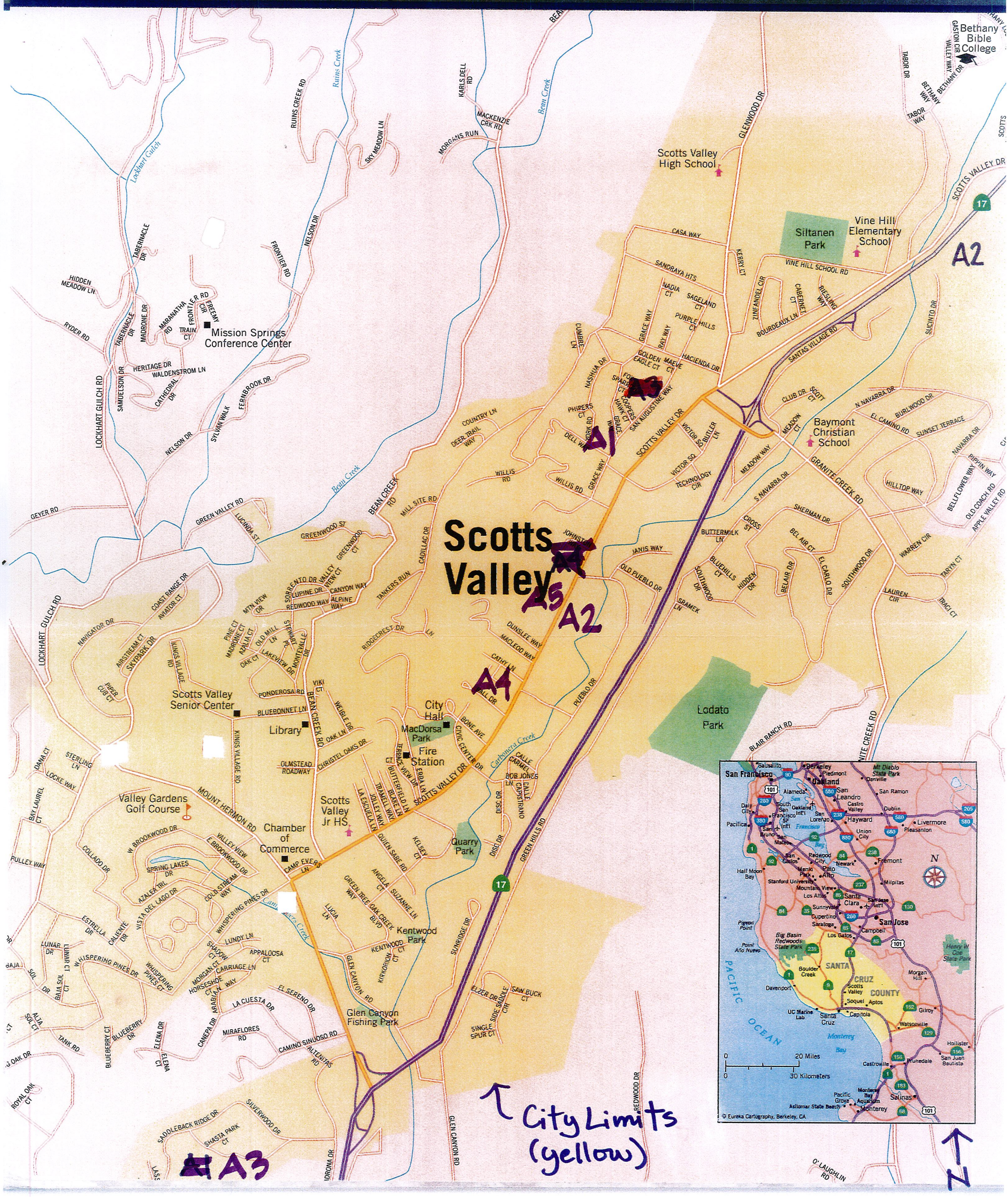
City of Scotts Valley - Current Cumulative Trip Generation List - February 26, 2015 (Updated as needed by the Planning Dept.)

Map # or Cat.	Project Name or Street Address	APN	Property Owner / Developer	Existing Zoning	Given Size	Converted Size	ITE Code	ITE Description	Notes
A	**Approved Planning Permits (for new construction) - Building Permits Issued / Under Construction**								
A1	623.5 Grace Way **		John Steward	Residential - SFD (R-1-10)	1 unit	1 unit	210	Single-Family Detached Housing	
A2	Lexington Hotel - 5030 Scotts Valley Dr		Merced Hospitality	Commercial - Service (C-S)	1.74 acres	119 rooms	310	Hotel	
A3	Monte Fiore (aka Heritage Parks)			Residential - SFD (R-1-40)	2 units	2 units	210	Single-Family Detached Housing	
A4	The Manor - 4803 Scotts Valley Dr - Parcel B **		Ian Carney	Residential - Multi-family (R-H)	8 units	8 units	210	Single-Family Detached Housing	
A5	Woodside - Commercial - 5011 Scotts Valley Drive		Castle Companies	Commercial - Service (C-S)	16,500	5,300	710	General Office Building	
B	**Approved Planning Permits (for new construction) - Building Permits NOT Issued**								
B1	12 Blake Lane		A. Scarborough	Residential - Multi-Family (R-H)	3 units	3 units	230	Residential Condominium/Townhouse	
B2	22 Blake Lane (Tentative Map expires 7/16/2015)		Paul Locatelli	Residential - Multi-family (R-H)	6 units	6 units	230	Residential Condominium/Townhouse	
B3	364 Collado Drive **		Bill Brooks	Residential - SFD (R-1-10/PD)	4 lots	4 units	210	Single-Family Detached Housing	
B4	Fire Station		SV Fire District	Commercial - Service (C-S)	9,600 sf	9,600 sf	710	Fire Station - Public Service Agency	Uncertain if ITE code exists for fire station
B5	Gerald Smith - Timber Ridge Lane		Gerry Smith	Residential - SFD (R-R-2.5)	15 acres	4 units	210	Single-Family Detached Housing	
B6	Granite Creek Estates			Residential - SFD (R-1-40)	1 unit	1 unit	210	Single-Family Detached Housing	
B7	Granite Creek		Hodges	Residential - SFD (R-1-40)	2 units	2 units	210	Single-Family Detached Housing	
B8	Monte Fiore (aka Heritage Parks) - Silverwood Dr			Residential - SFD (R-1-40)	6 units	6 units	210	Single-Family Detached Housing	
B9	125 N. Navarra		Tony Allbach	Residential - SFD (R-1-10)	1 unit	1 unit	210	Single-Family Detached Housing	
B10	Pinnacle View (behind Pinnacle Pass on Mt. Hermon Rd)			Residential - Multi-family (R-VH)	20 units	20 units	230	Residential Condominium/Townhouse	
B11	Polo Heights (Lots 2, 3, and 4) - Orchard Run Road		George Smith	Residential - SFD (R-R-2.5)	17 acres	3 units	210	Single-Family Detached Housing	
B12	Polo Ranch - Santa's Village Rd		Lennar Homes	Residential - SFD (R-1-10)	40 units	40 units	210	Single-Family Detached Housing	
B13	Ridgecrest PUD - Ridgecrest Dr			Residential - SFD (R-R-2.5/PD)	3 units	3 units	210	Single-Family Detached Housing	
B14	Scotts Valley Dr / Bean Creek Rd	022-861-21	Michael Tansy	Commercial - Service (C-S)	5 units	5 units	230	Residential Condominium/Townhouse	
B15	5310 Scotts Valley Dr - Mixed-Use - Commercial		Steve Bogner	Commercial - Service (C-S)	2 units	2 units	220	Apartment	
B16	Terrace View Dr		Sid Slater	Residential - Multi-family (R-H)	1 unit	1 unit	210	Duplex	Convert detached SFD into a duplex
B17	Town Center Specific Plan & EIR			Commercial - Service (C-S)	n/a	9,098 sf	TBD	Performance Art Center / Multi-use	See * in legend.
C	**Submitted Planning Permit Applications (for new construction) - Currently Being Processed / Not Approved**								
C1	Meadow Way		Marlyn Bergman	Residential - SFD (R-1-10)	4 unitss	4 units	210	Single-Family Detached Housing	
C2	Oak Creek Park Mixed-Use - 3640 Glen Canyon Rd		Greg Eger	Commercial - Service (C-S)	12,225 sf	12,225 sf	710	General Office Building	
C3	Polo Ranch Affordable Hsng - 4303-A Scotts Valley Dr		Lennar Homes	Residential - Multi-family (R-H)	6 units	6 units	230	Residential Condominium/Townhouse	
C4	11 Ridgecrest Drive		Steve Beneden	Residential - SFD (R-R-2.5)	1 unit	1 unit	210	Single-Family Detached Housing	
C5	The Terrace at Scotts Valley	022-162-69	Apple Homes	Residential - Multi-family (R-M-6)	2.30 acres	20 units	230	Residential Condominium/Townhouse	medium high density 5 to 9 units/acre
	on Scotts Valley Dr / Bean Creek Rd	022-162-74			0.45 acres				
C6	Town Center Specific Plan & EIR		Multiple owners	Commercial - Service (C-S)	28 acres	100,000 sf	820	Shopping Center	Stand-alone Retail
D	**Major Vacant Lots or Potential Redevelopment Sites - Planning Permits Not Formally Submitted (but may include City's preliminary review of concept plans)**								
DI	Scotts Valley Enterprise Site (former Borland Phase II) **		City Ventures	Research & Development / PD	6.79 acre	6.79 acre	760	Research and Development Center	
D2	Pinnacle Pass - 75 Mt. Hermon Rd		John Kontoudakis	Commercial - Service (C-S)	1.90 acres	1.90 acres	820*	Shopping Center	See * in legend. Concept plan only reviewed ("Preliminary Review").
D3	4421 Scotts Valley Dr / Terrace View Dr		Many Soma	Commercial - Service (C-S)	0.43 acre	4,683 sf	820*	Shopping Center	See * in legend. No situs; APN 022-172-21
D4	Gateway South Site (EIR for commercial store)			Commercial - Service (C-S)	143,000 sf	143,000 sf	815	Major Single Retail Store	existing entitlement is for 136,000 sf office bldg has expired)
E	**General Plan Housing Element Sites (years 2009-2014)**								
E1	None								
E2	Erba Lane / across from Fire District Station	022-481-01	City of Scotts Valley	Residential - Multi-family (R-H)	11 units	11 units	230	Residential Condominium/Townhouse	high density 9 to 15 units/acre Note: unit numbers are imperical and do not reflect practical development
E3	La Madrona Rd / Altenitas Rd	021-321-04	Bei Scott Co.	Residential - Multi-family (R-VH)	2.03 acres	31-41 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E4	Mt. Hermon Rd	022-151-08	Greg Flowers	Residential - Multi-family (R-VH)	0.50 acres	8-10 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E5	Mt. Hermon Rd	022-151-07	Mike Castle	Residential - Multi-family (R-VH)	0.86 acres	13-17 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E6	Mt. Hermon Rd / Glen Canyon Rd	021-151-03	T & G Jaeger	Residential - Multi-family (R-VH)	1.10 acres	15-20 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E7	Mt. Hermon Rd / Glen Canyon Rd	021-151-04	Richard Quinn	Residential - Multi-family (R-M-8)	0.57 acres	3-5 units	230	Residential Condominium/Townhouse	medium high density 5 to 9 units/acre
E8	Mt. Hermon Rd / Glen Canyon Rd	022-151-05	Ellen McCombs	Residential - Multi-family (R-VH)	1.72 acres	26-34 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E9	Mt. Hermon Rd / Glen Canyon Rd	022-151-11	J & B Duggan	Residential - Multi-family (R-VH)	1.10 acres	16-22 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
E10	Scotts Valley Dr / Dunslee Way **	022-451-01	Patricia Norton	Commercial - Service (C-S)	2.00 acres	15-20 units	230	Residential Condominium/Townhouse	very high density 15.1 to 20.0 units/acre
						10, 890 sf	820*	Shopping Center	See * in legend.
	Partial Legend/Notes								
*	Although ITE Code 814 (Specialty Retail Center) is the best description of expected use given location and parcl size, ITE Code 820 (Shopping Center) may be used because more traffic data is available with this code.								
**	Anticipated to soon be completed or be in Categories A or C								
PUD	Planned Unit Development								
PD	Planned Development								
SFD	Single Family Dwelling (R-1 zoning districts)								

Scotts Valley Map

A – Projects under construction

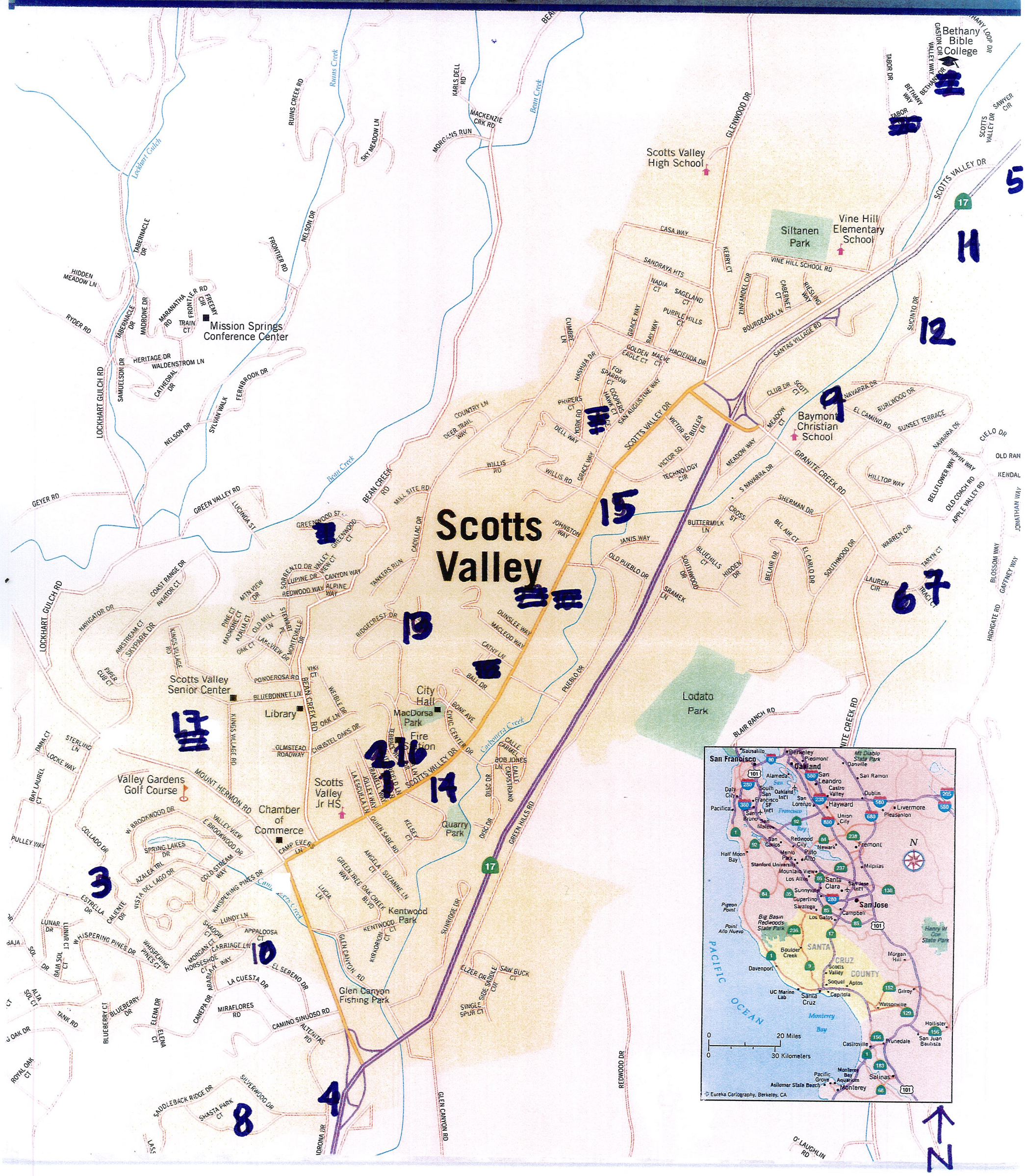
City of Scotts Valley - Feb 26, 2015
Cumulative Trip Generation Map
Planning Department
One Civic Center Drive
Scotts Valley, CA 95066



Scotts Valley Map

B – Projects approved; but no building permits issued

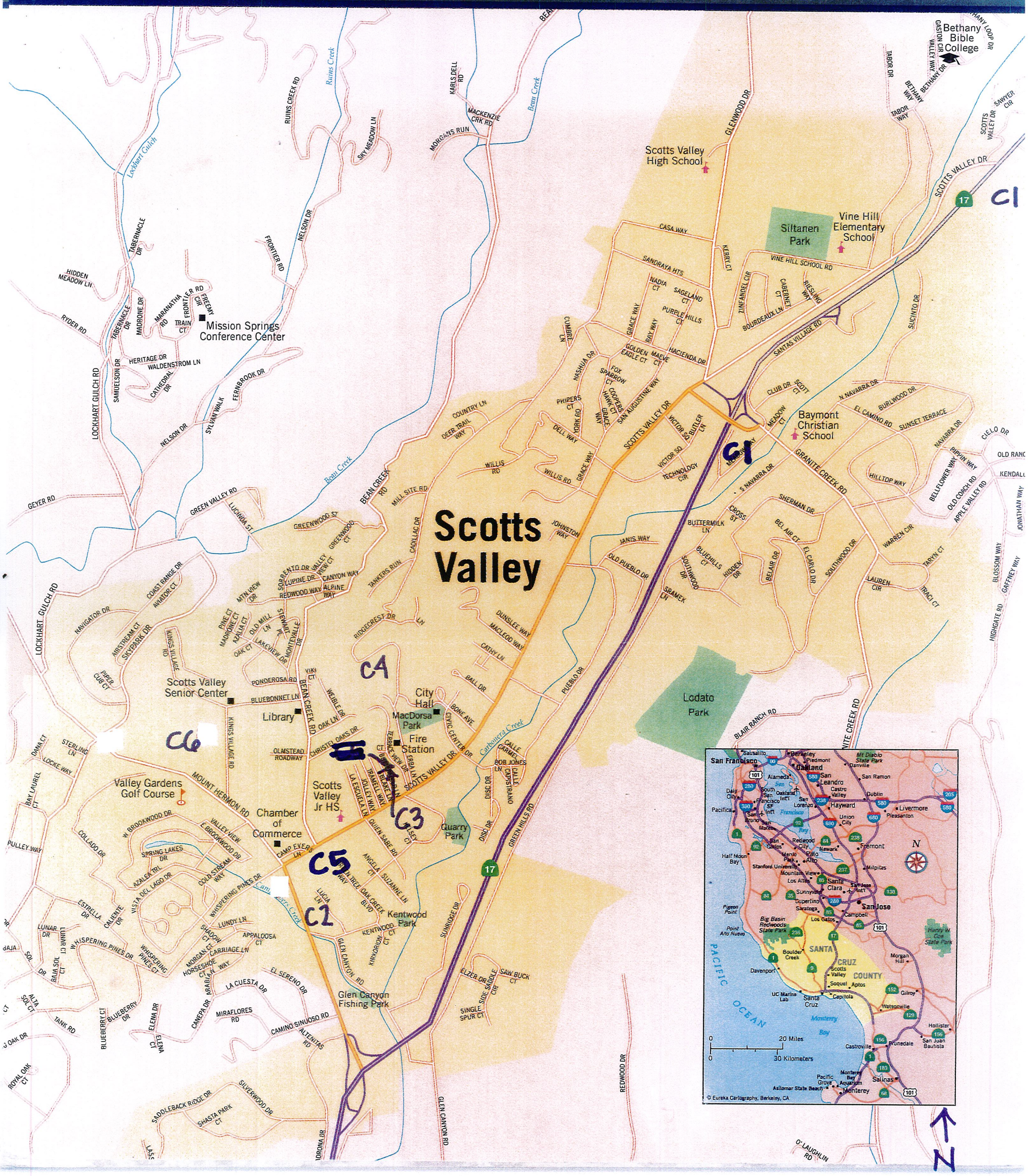
City of Scotts Valley - Feb 26, 2015
Cumulative Trip Generation Map
Planning Department
One Civic Center Drive
Scotts Valley, CA 95066



Scotts Valley Map

C – Projects submitted; not approved

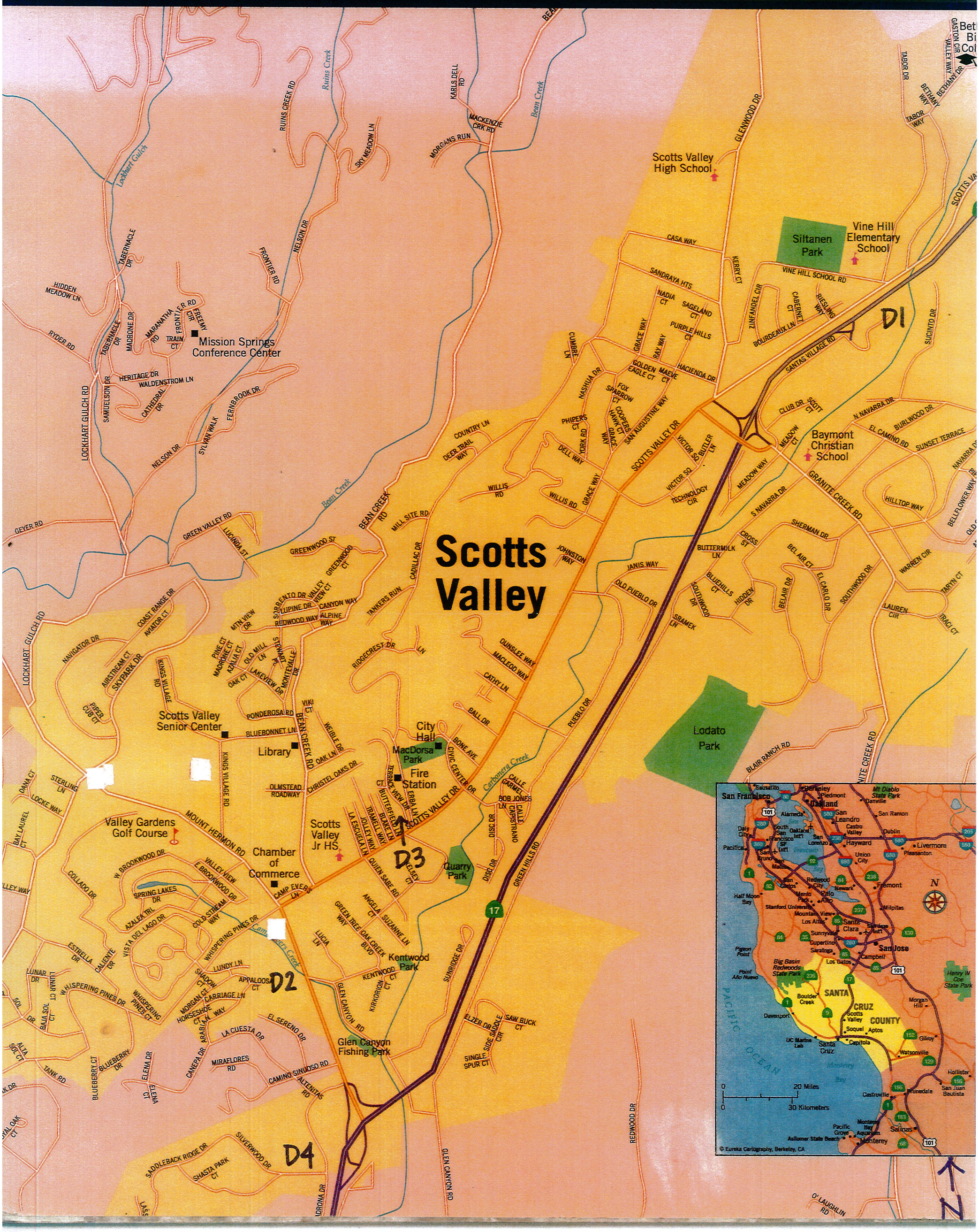
City of Scotts Valley - Feb 26, 2015
Cumulative Trip Generation Map
Planning Department
One Civic Center Drive
Scotts Valley, CA 95066



Scotts Valley Map

D – Major vacant lots, or potential sites for redevelopment; not formally submitted

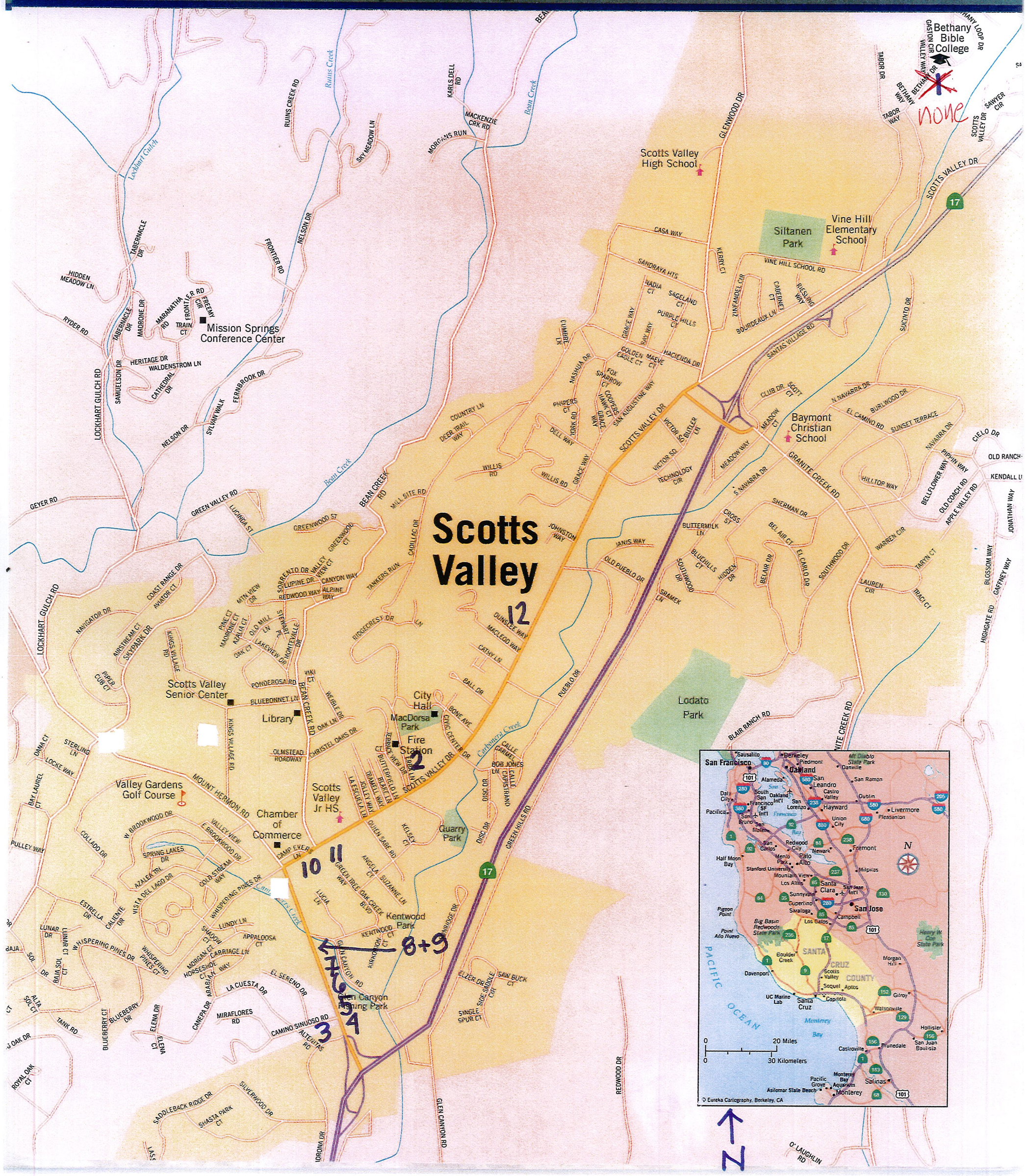
City of Scotts Valley - Feb 26, 2015
Cumulative Trip Generation Map
Planning Department
One Civic Center Drive
Scotts Valley, CA 95066



Scotts Valley Map

E – City's Housing Element Sites

City of Scotts Valley - Feb 26, 2015
Cumulative Trip Generation Map
Planning Department
One Civic Center Drive
Scotts Valley, CA 95066



Appendix J – Peak Hour Signal Warrant Analysis

Peak Hour Signal Warrant Analysis

Intersection: Scotts Valley Drive / Victor Square
Scenario: Existing plus Project Conditions

The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

   1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and

      AM Peak: 0.4 vehicle-hours of delay < 4 vehicle-hours

      PM Peak: 3.0 vehicle-hours of delay < 4 vehicle hours

      *The condition is **not met** for either peak hour.*

   2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and

      AM Peak: One-lane approach volume = 31 vehicles < 100 vehicles

      PM Peak: One-lane approach volume = 64 vehicles < 100 vehicles

      *The condition is **not met** for either peak hour.*

   3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

      AM Peak: Total entering volume = 1,540

      PM Peak: Total entering volume = 1,696

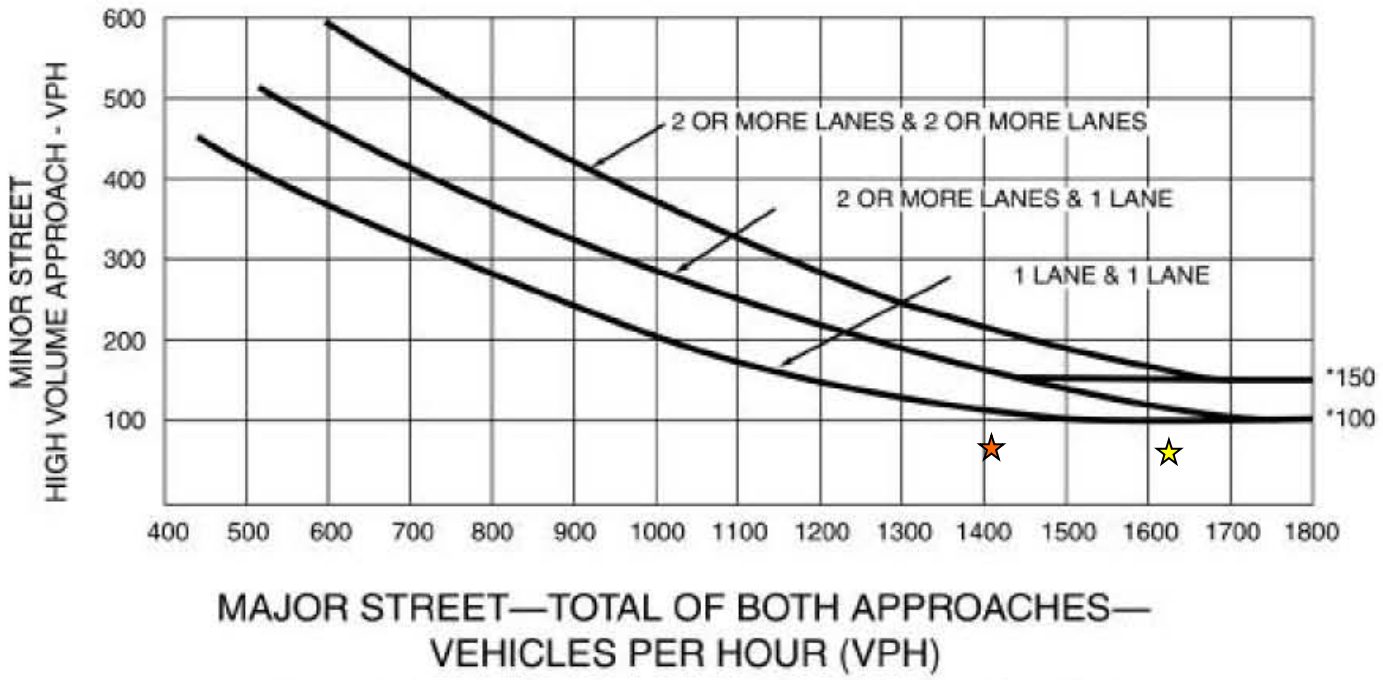
      *The condition is **met** for both peak hours.*

Two of the three conditions are met, therefore the criteria is not met

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for any one hour (any four consecutive 15-minute periods of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

A.M. and P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
★ A.M. Peak Hour: Major (Minor) Street Volume = 1,476 (65) VPH
☆ P.M. Peak Hour: Major (Minor) Street Volume = 1,622 (64) VPH

Victor Square is the minor street with two and one approach lanes in the eastbound and westbound directions respectively. Scotts Valley Drive is the major street with three approach lanes in the N-S direction.

A signal is <u>not</u> warranted for the A.M. and P.M. Peak Hours

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Signal Warrant Analysis

Intersection: Scotts Valley Drive / Victor Square
Scenario: Background plus Project Conditions

The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

   1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and

      AM Peak: 0.5 vehicle-hours of delay < 4 vehicle-hours

      PM Peak: 4.0 vehicle-hours of delay < 4 vehicle hours

      *The condition is **met** for the PM peak hour.*

   2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and

      AM Peak: One-lane approach volume = 31 vehicles < 100 vehicles

      PM Peak: One-lane approach volume = 64 vehicles < 100 vehicles

      *The condition is **not met** for either peak hour.*

   3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

      AM Peak: Total entering volume = 1,646

      PM Peak: Total entering volume = 1,815

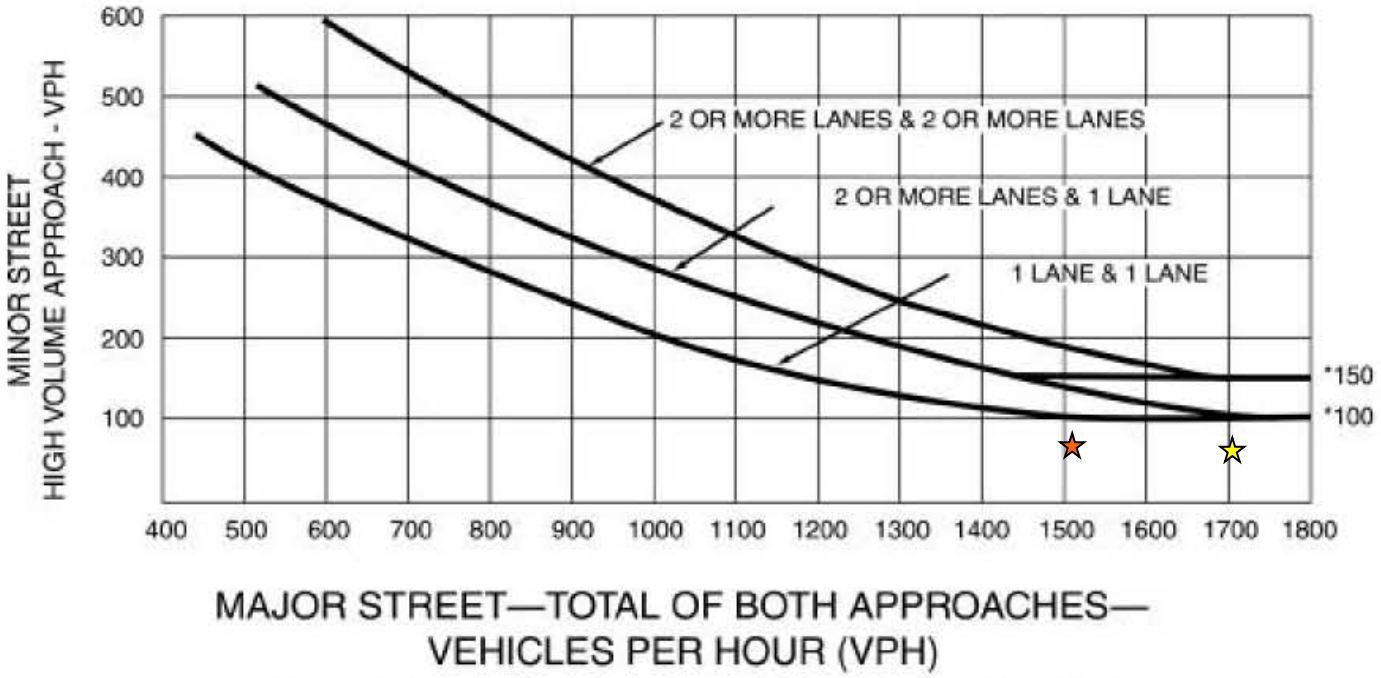
      *The condition is **met** for both peak hours.*

Two of the three conditions are met, therefore the criteria is not met

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for any one hour (any four consecutive 15-minute periods of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

A.M. and P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
★ A.M. Peak Hour: Major (Minor) Street Volume = 1,550 (65) VPH
☆ P.M. Peak Hour: Major (Minor) Street Volume = 1,710 (64) VPH

Victor Square is the minor street with two and one approach lanes in the eastbound and westbound directions respectively. Scotts Valley Drive is the major street with three approach lanes in the N-S direction.

A signal is <u>not</u> warranted for the A.M. and P.M. Peak Hours

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Signal Warrant Analysis

Intersection: Scotts Valley Drive / Victor Square
Scenario: Cumulative plus Project Conditions

The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:

   1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and

      AM Peak: 0.8 vehicle-hours of delay < 4 vehicle-hours

      PM Peak: 7.4 vehicle-hours of delay < 4 vehicle hours

      *The condition is **met** for the PM peak hour.*

   2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and

      AM Peak: One-lane approach volume = 38 vehicles < 100 vehicles

      PM Peak: One-lane approach volume = 78 vehicles < 100 vehicles

      *The condition is **not met** for either peak hour.*

   3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

      AM Peak: Total entering volume = 1,911

      PM Peak: Total entering volume = 2,101

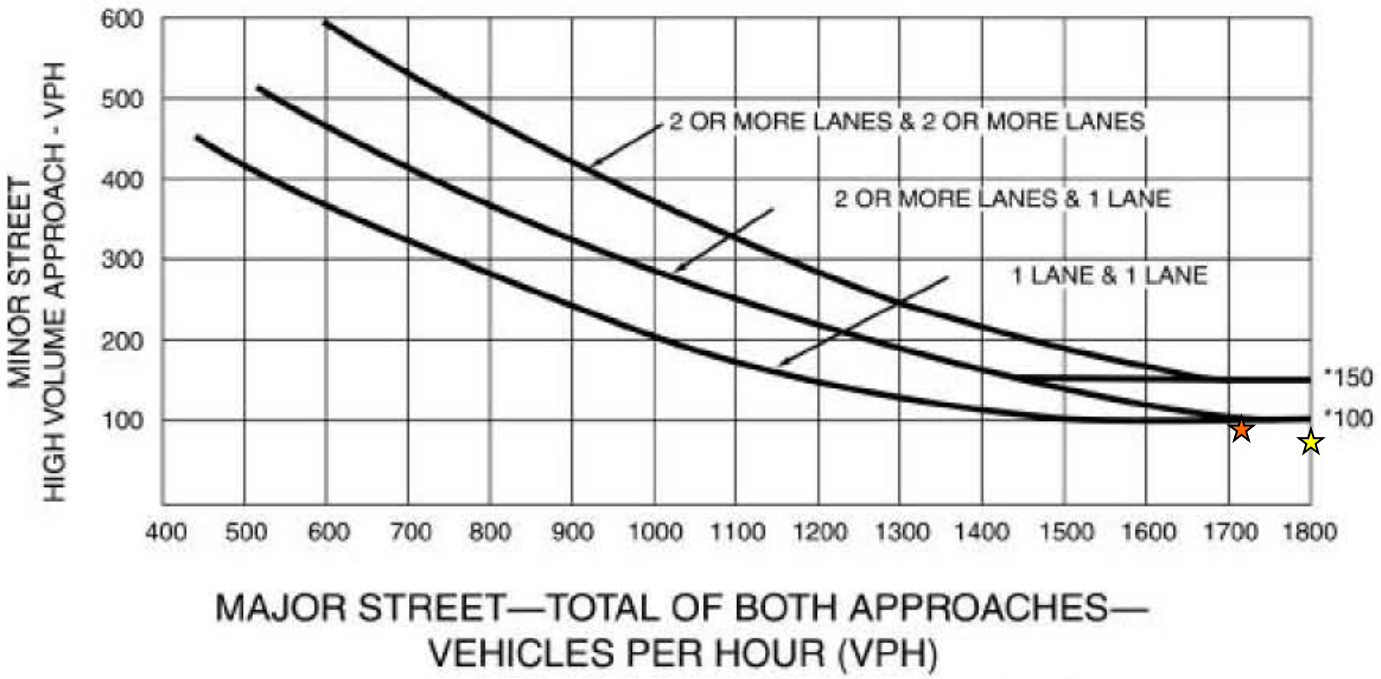
      *The condition is **met** for both peak hours.*

Two of the three conditions are met, therefore the criteria is not met

B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for any one hour (any four consecutive 15-minute periods of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

A.M. and P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
★ A.M. Peak Hour: Major (Minor) Street Volume = 1,794 (90) VPH
☆ P.M. Peak Hour: Major (Minor) Street Volume = 1,973 (78) VPH

Victor Square is the minor street with two and one approach lanes in the eastbound and westbound directions respectively. Scotts Valley Drive is the major street with three approach lanes in the N-S direction.

A signal is <u>not</u> warranted for the A.M. and P.M. Peak Hours

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3