

FinneyArnoldLLP

**Twenty-Eighth Floor
633 West Fifth Street
Los Angeles, CA 90071
tfinney@falawyers.com
C (310) 729-7266
sarnold@falawyers.com
C (213) 718-3468**

November 18, 2019

Santa Barbara County Board of Supervisors
123 E. Anapamu Street
Santa Barbara, CA 93101

RE: Opposition in Support of Appeal of the Orcutt Planning Commission's Approval of
Case Numbers 16TPM-00000-00001/TPM 14,824, 16DVP-00000-00009,
16CUP-00000-00017, 16CUP-00000-00018, and 16OSP-00000-00002

Dear Sir or Madam:

This letter supports the appeal filed by Residents for Orcutt Sensible Growth (“Appellant”), which will be heard by the Santa Barbara County Board of Supervisors (“Board of Supervisors”), tomorrow, November 19, 2019, at 9:00 a.m. Please be aware that the timing of the hearing, and the distance between Orcutt and Santa Barbara, have made it prohibitive for individual members of Appellant to attend the hearing to speak. However, Appellant will be represented by the undersigned as their attorney.

Please find attached hereto, and made a part hereof, an independent study group traffic report which was conducted for Appellant by KOA (“Traffic Report”). The Traffic Report analyzes the cumulative impact of Key Sites 1, 2 and 3. This analysis makes clear that the development Key Site 2 a problem, not only for the reasons having to do with this particular site as set forth in Appellant’s appeal, filed before this body, on August 22, 2019, which is incorporated herein by this reference (“Appeal”), but also because the overall intended development project is being cobbled together piecemeal, without taking into account the looming environmental impacts that will be caused by Key Sites 1 and 3.

Gavin Moores, of CPDG, Inc, the developer of Key Site 2 (“Applicant”) responded in writing to Appellant regarding the issues raised in the Appeal. Appellant will reply to Applicant’s response during the hearing tomorrow to move the discussion forward. In the meantime, Applicant has requested to begin grading, excavation, and other earth works at Key Site 2 while this appeal is pending. Appellant opposes any development work at Key Site 2 while the Appeal is pending.

Thank you for your consideration of this critical matter. If you have any questions, or need additional information, please call me.

Sincerely,



Tal C. Finney, Esq., Of
FINNEY ARNOLD, LLP



TECHNICAL MEMORANDUM

Date: November 18, 2019

To: Alex Campbell, Urban Planning Advisor

From: Brian Marchetti, AICP

Subject: Traffic Impact Analysis and Review – Orcutt Project Key Sites and Cumulative Impacts

Overview

This study examined the development of three vacant parcels (known as the “key sites”) in the unincorporated community of Orcutt in the County of Santa Barbara, using and adding to data from previous analyses. Existing and buildout period traffic Impacts for each of the three sites were examined individually and then the trips generated by the three sites were added together to define cumulative buildout (also referred to in this report as “cumulative” or “buildout”) conditions. In addition, the results of a traffic and circulation analysis prepared for one of the sites in 2015 were reviewed for methodological accuracy, and compared with the results of this study.

The study area included four intersections and four roadway segments within the local area, matching the most recent study for Site 3.

Intersections

1. Clark Avenue and Stillwell Rd
2. Clark Avenue and Sunny Hills Rd
3. Clark Avenue and US101 SB Ramps
4. Clark Avenue and US101 NB Ramps

Roadway Segments

1. Clark Avenue, from Bradley Road to Stillwell Road
2. Clark Avenue, from Stillwell Road to US 101
3. Stillwell Road, South of Clark Avenue
4. Sunny Hills Road, South of Clark Avenue

Traffic counts and daily traffic volumes for these locations, for the previously-analyzed years of 2011 (reflecting pre-project conditions) and 2015 (reflecting project buildout conditions) were taken from the traffic and circulation analysis completed for Site 3 in 2015 by Penfield and Smith. All of the analysis used older data extrapolated out to the then-horizon year of 2015. KOA did not add ambient growth to the analysis, nor were cumulative projects trips updated (for developments other than the three sites).

Conclusions

The development of Sites 2 and 3 alone would cause LOS levels to deteriorate significantly below the existing and future baseline levels at two of the four study intersections. Considering the cumulative impacts of all three sites, by measuring the impacts of all three projects as a whole, significant impacts would occur at all four study intersections and two out of four of the study roadway segments.



Project Description and Location

The three key sites are located on the western edge of the unincorporated community of Orcutt in the County of Santa Barbara, adjacent to the US-101 freeway. Site 1 borders the north side of Clark Road and Site 2 is located immediately south of Clark Road. Site 3 is located further to the south, beyond the Sunny Hills Mobile Home Estates site.

Development plans for the Site 1 propose a mixed-use development, with commercial, residential and hotel uses. Site 2 will be developed with commercial uses including a gas station and restaurant, while the third site will be developed exclusively with residential uses, including multi-family structures and single-family homes.

Previous Traffic Study

Penfield and Smith completed a traffic and circulation analysis for Site 3 in 2013, the results of which were incorporated into the project 2015 Draft EIR. The study examined the traffic impacts of the project under existing (2011) and cumulative (2015) conditions. The buildup conditions incorporated three proposed improvements to study area roadways: signalization of the intersection of Clark Avenue and Sunny Hills Drive, the widening of Clark Avenue between US-101 and Stillwell Road to two lanes in each direction, and the improvement of the US-101 ramp intersections. The analysis indicated that peak-hour significant impacts would occur at the intersection of Clark Avenue and the US-101 southbound ramps under existing conditions and at the intersections of Clark Avenue and the US-101 southbound ramps and Clark Avenue and the US-101 northbound ramps under cumulative conditions.

The analysis for the KOA study summarized in this document examined the same four study intersections and the same roadway segments. The Project volumes from the analysis were used in the KOA analysis of the Site 3 traffic impacts. The existing and cumulative projects conditions from the study likewise defined pre-project traffic conditions for all three sites. The volumes were maintained for the purposes of consistency with the Site 3 EIR.

The methods and results of the 2013 traffic and circulation analysis are reviewed later in this memo.

Methodology

The County of Santa Barbara designates the Intersection Capacity Utilization (ICU) as the preferred analysis method for signalized intersections. Therefore, signalized intersections in the study were analyzed according to this method. The concept of roadway level of service under the ICU methodology is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. Traffic Impacts for signalized intersections are considered significant where the project increases the volume-to-capacity ratio or number of trips at the intersection beyond a critical threshold, shown in the following table.

Post-Project Intersection LOS	Increase in V/C or Trips Required for Significant Impact
LOS A	0.2
LOS B	0.15



LOS C	0.1
LOS D	15 Project Trips
LOS E	10 Project Trips
LOS F	5 Project Trips

Stop-controlled intersections were analyzed based on the Highway Capacity Manual (HCM) un-signalized intersection methodology. This method calculates roadway level of service based on intersection delay, defined as the worst-case approach delay experienced by users of the intersection who must stop or yield to free-flow through traffic. Significant traffic impacts were determined for these intersections where the post-project traffic operates below LOS C and the number of project trips exceeds the critical threshold provided in the table above.

Per the Orcutt Community Plan, project impacts on roadway segments are considered significant where the project exceeds an "Acceptable Capacity", which the Penfield and Smith study defined as Level-of-Service C.

Level of Service Definitions for Stop-Controlled and Signalized Intersections and Roadway Segments are provided in the following table.

Level of Service	Definition	Signalized and Roadway Segment: Volume to Capacity Ratio	Unsignalized: Average Control Delay (seconds/vehicle)
A	Excellent Operation. Free-flow speeds prevail. Vehicles are almost unimpeded in their ability to maneuver within the traffic stream.	0 - .600	≤ 10
B	Very good operation. Reasonably free-flow speeds are maintained. The ability to maneuver within traffic is only slightly restricted.	.601 to .700	>10 to 15
C	Good operation. Flow with speeds at or near free-flow speed of the roadway. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require more care and vigilance on the part of the driver.	.701-.800	>15 to 25
D	Fair operation. Speeds begin to decline slightly with increasing flows. In this range, density begins to increase somewhat more quickly with increasing flow. Freedom to maneuver within the traffic stream is noticeably limited.	.801-.900	>25 to 35
E	Poor operation. Operation at capacity with no usable gaps in the traffic stream. Any disruption to the traffic stream has little or no room to dissipate.	.901-1.000	>35 to 50
F	Forced Flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes: Therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	>1.000	> 50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington D.C., 2000 and Interim Manuals on Highway Capacity, NCHRP Circular 2012, 1982.



The County of Santa Barbara *Environmental Thresholds and Guidelines Manual* also considers traffic impacts significant where the project access point creates an unsafe situation requiring a traffic signal or where the project adds traffic to a roadway with hazardous design features. Since each project's completion will be accompanied by signal upgrades to the intersection of Clark Avenue and Sunny Hills Road, and as all driveways onto major streets will be designed as right-in/right-out, none of the project access points would be considered unsafe in the post-project scenario. None of the study intersections or roadway segments have particularly hazardous conditions. Therefore, none of these two additional impact standards applies to the key sites.

Existing and Future Baseline Conditions

Tables 1 through 4 provide summaries of intersection and roadway segment operations with the 2011 and 2015 baseline traffic volumes taken from the Penfield and Smith report. The 2015 analysis assume signalization of the intersection of Clark Avenue and Sunny Hills Road, the widening of Clark Avenue to two lanes per direction and improvements at the freeway ramp intersections as defined in the Penfield and Smith report.

Table 1 – Intersection Level of Service, Existing (2011)

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Clark Ave and Stillwell Rd	0.514	A	0.549	A
2	Clark Ave and Sunny Hills Rd	23.7	C	42.9	E
3	Clark Avenue and US101 SB Ramps	26.4	D	26.5	D
4	Clark Avenue and US101 NB Ramps	>100	F	>100	F

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.; Delay = Average Vehicle Delay, shown in seconds of delay.

Table 2 – Intersection Level of Service, Cumulative Baseline (2015)

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Clark Ave and Stillwell Rd	0.576	A	0.692	B
2	Clark Ave and Sunny Hills Rd	0.475	A	0.620	B
3	Clark Avenue and US101 SB Ramps	35.1	E	88.1	F
4	Clark Avenue and US101 NB Ramps	>100	F	>100	F

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format; Delay = Average Vehicle Delay, shown in seconds of delay.



Table 3 – Roadway Level of Service, Existing (2011)

Roadway Segment		Weekday			
		ADT	V/C	Capacity	LOS
1	Clark Avenue, from Bradley Road to Stillwell Road	16,100	0.336	47,887	A
2	Clark Avenue, from Stillwell Road to US 101	15,800	0.465	33,944	A
3	Stillwell Road, South of Clark Avenue	1,800	0.203	8,873	A
4	Sunny Hills Road, South of Clark Avenue	800	0.090	8,873	A

Table 4 – Roadway Level of Service, Cumulative Baseline (2015)

Roadway Segment		Weekday			
		ADT	V/C	Capacity	LOS
1	Clark Avenue, from Bradley Road to Stillwell Road	20,600	0.430	47,887	A
2	Clark Avenue, from Stillwell Road to US 101	18,500	0.386	47,887	A
3	Stillwell Road, South of Clark Avenue	5,700	0.642	8,873	B
4	Sunny Hills Road, South of Clark Avenue	7,100	0.542	13,099	A

Trip Generation Estimate

Trip generation totals for Site 3 were taken from the 2013 traffic and circulation analysis, while the trip generation for each use in Sites 1 and 2 was derived from the 10th Edition (most current) of the Institute of Transportation Engineers *Trip Generation Manual*. The Trip Generation for Sites 1 and 2 is provided in Tables 1 and 2.

Table 5 – Trip Generation, Site 1

Land Use	Units	Intensity	Daily	Total	In	Out	Total	In	Out
Hotel	Rooms	125	1045	59	35	24	75	38	37
Commercial (Shopping Center)	KSF	36.88	1392	35	22	13	141	68	73
Residential	DU	252	867	76	21	55	83	35	48
Pharmacy With Drive-Thru Facility	KSF	21.516	2349	83	44	39	221	111	110
Dining*	KSF	4.5	505	45	25	20	44	27	17
Retail (Shopping Center)	KSF	2	76	2	1	1	8	4	4
Drive Through Facility	KSF	6.16	2901	248	126	122	201	105	96
Drive Through Facility	KSF	6.6	3108	265	135	130	216	112	104
Drive Through Facility	KSF	6.7	3155	269	137	132	219	114	105
Gas Station With Mini Mart	KSF	4.83	6955	367	187	180	427	217.77	209.23
Gas Station Car Wash	KSF	2.752	391	39	20	19	39	20	19
Dining*	KSF	6	673	60	33	27	59	37	22
Brewery*	KSF	7.07	793	70	38.5	31.5	69	43	26
Total			24210	1619	825	794	1802	932	870



Table 6 – Trip Generation, Site 2

Land Use	Units	Intensity	AM Peak			PM Peak		
			Daily	Total	In	Out	Total	In
Retail (Grocery Store)	KSF	28.02	2992	107	64	43	259	132
Retail Shop	KSF	6.816	257	6	4	2	26	12
Restaruant With Drive-Through	KSF	2.7	1272	109	56	53	88	46
Convenience Store	KSF	4.135	3152	259	130	129	203	104
Car Wash	KSF	1.25	178	18	9	9	18	9
Gas Station	Fueling Stations	12	2064	123	62	61	168	84
Total			9914	622	325	297	762	387
<i>ITE 10th Edition</i>								

Site 1 will generate 24,210 trips per day, including 1,619 trips in the AM peak hour (825 in and 794 out) and 1,802 trips in the PM peak hour (932 trips in and 870 trips out). Site 2 will generate 9,914 trips per day, including 499 trips in the AM peak hour (263 in and 236 out) and 594 trips in the PM peak hour (303 trips in and 291 trips out).

Impact Analysis – Existing plus-Project Conditions

The existing plus-project impact analysis combines project trips and year 2011 baseline trips (from the previous report). For sites 1 and 2, the existing plus project analysis assumes the completion of the project driveways, the signalization of the intersection of Clark Avenue and Sunny Hills Road, and the widening of Clark Avenue between Stillwell Avenue and US 101 to two lanes in each direction, as shown on these projects' site plans.

For site 3, the existing plus project analysis assumes no improvements are made on Clark Avenue or Sunny Hills Road, maintaining consistency with the previous analysis. The impacts to intersections and roadway segments are provided in the tables below.

Table 7 – Existing plus-Project Conditions and Impacts, Site 1

Study Intersections		Peak Hour	Existing Conditions		Existing with Project		Change in Delay or V/C	Site 1 Project Trips	Site 1 Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.514	A	0.601	B	0.087	598	No
		PM	0.549	A	0.648	B	0.099	667	No
2	Clark Ave and Sunny Hills Rd	AM	23.7	C	0.669	A	-	1316	No
		PM	42.9	E	0.773	A	-	1463	No
3	Clark Avenue and US101 SB Ramps	AM	26.4	D	>100	F	-	987	Yes
		PM	26.5	D	>100	F	-	1098	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	497	Yes
		PM	>100	F	>100	F	-	548	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).



Table 8 – Existing plus-Project Conditions and Impacts-Roadways, Site 1

Roadway Segment				Day of Week	Existing			Existing with Project			Significant Impact
					ADT	V/C	LOS	ADT	V/C	LOS	
1	Clark Avenue, from Bradley Road to Stillwell Road			Weekday	16,100	0.336	A	23,364	0.488	A	No
2	Clark Avenue, from Stillwell Road to US 101			Weekday	15,800	0.465	A	24,564	0.513	A	No
3	Stillwell Road, South of Clark Avenue			Weekday	1,800	0.203	A	2,526	0.285	A	No
4	Sunny Hills Road, South of Clark Avenue			Weekday	800	0.090	A	1,042	0.117	A	No

Intersections 3 and 4 would be significantly impacted by Site 1 project trips under existing conditions, deteriorating to LOS F. Operations at intersection 2 improve markedly in the post-project scenario based on the assumption that the intersection will be signalized (and the switch in analysis methodology from HCM to ICU). However, no roadway segments would be significantly impacted by Site 1 trips in this scenario.

Table 9 – Existing plus-Project Conditions and Impacts, Site 2

Study Intersections		Peak Hour	Existing Conditions		Existing with Project		Change in V/C or Delay	Site 2 Project Trips	Site 2 Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.514	A	0.551	A	0.037	209	No
		PM	0.549	A	0.595	A	0.046	248	No
2	Clark Ave and Sunny Hills Rd	AM	23.7	C	0.527	A	-	445	No
		PM	42.9	E	0.455	A	-	529	No
3	Clark Avenue and US101 SB Ramps	AM	26.4	D	37.5	E	11.1	279	Yes
		PM	26.5	D	>100	F	-	331	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	139	Yes
		PM	>100	F	>100	F	-	166	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Table 10 – Existing plus-Project Conditions and Impacts-Roadways, Site 2

Roadway Segment				Day of Week	Existing			Existing with Project			Significant Impact
					ADT	V/C	LOS	ADT	V/C	LOS	
1	Clark Avenue, from Bradley Road to Stillwell Road			Weekday	16,100	0.336	A	19,570	0.409	A	No
2	Clark Avenue, from Stillwell Road to US 101			Weekday	15,800	0.465	A	20,217	0.422	A	No
3	Stillwell Road, South of Clark Avenue			Weekday	1,800	0.203	A	1,978	0.223	A	No
4	Sunny Hills Road, South of Clark Avenue			Weekday	800	0.090	A	7,987	0.900	D	Yes

Intersections 3 and 4 would be significantly impacted by Site 2 project trips under existing conditions, deteriorating to LOS F. The roadway segment on Stillwell Road, South of Clark Avenue would also be significantly impacted, operating at LOS D in post-project conditions. Once again, operations at intersection 2 improve markedly based on the assumption that the intersection will be signalized.



Table 11 – Existing plus-Project Conditions and Impacts, Site 3

Study Intersections		Peak Hour	Existing Conditions		Existing with Project		Change in V/C or Delay	Project Trips	Site 3 Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.514	A	0.525	A	0.011	41	No
		PM	0.549	A	0.564	A	0.015	52	No
2	Clark Ave and Sunny Hills Rd	AM	23.7	C	40.8	E	17.1	58	Yes
		PM	42.9	E	54.1	F	11.2	71	Yes
3	Clark Avenue and US101 SB Ramps	AM	26.4	D	27.4	D	1.0	29	Yes
		PM	26.5	D	27.5	D	1.0	45	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	21	Yes
		PM	>100	F	>100	F	-	20	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Table 12 – Existing plus-Project Conditions and Impacts-Roadways, Site 3

Roadway Segment			Day of Week	Existing			Existing with Project			Significant Impact
				ADT	V/C	LOS	ADT	V/C	LOS	
1	Clark Avenue, from Bradley Road to Stillwell Road		Weekday	16,100	0.336	A	16,578	0.346	A	No
2	Clark Avenue, from Stillwell Road to US 101		Weekday	15,800	0.465	A	16,297	0.480	A	No
3	Stillwell Road, South of Clark Avenue		Weekday	1,800	0.203	A	2,098	0.236	A	No
4	Sunny Hills Road, South of Clark Avenue		Weekday	800	0.090	A	1,497	0.169	A	No

Intersections 2, 3 and 4 would be significantly impacted by Site 3 project trips under existing conditions, deteriorating to LOS E or F in at least one peak hour. However, no roadway segments would be significantly impacted by Site 1 trips in this scenario. The last finding mirrors that of the Penfield and Smith report.

Future with Project (“Buildout”) Analysis

Project trips were added to the future year-2015 baseline conditions analysis of the previous report, to provide the Buildout impact analysis. This scenario assumed the completion of all improvements assumed as part of future baseline conditions, as well as improvements specific to each project such as driveways.

Site 1 would create impacts at all intersections and the Stillwell Road roadway segment under Buildout baseline conditions, under both delay-based and capacity-based LOS methodologies.



Table 13 – Buildout plus-Project Conditions and Impacts, Site 1

Study Intersections		Peak Hour	Pre-Project Buildout		Build Out with Project		Project Only Change in V/C or Delay	Site 1 Project Trips	Site 1 Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.576	A	0.710	C	0.134	598	Yes
		PM	0.692	B	0.840	D	0.148	667	Yes
2	Clark Ave and Sunny Hills Rd	AM	0.475	A	0.699	B	0.224	1316	Yes
		PM	0.620	B	0.891	D	0.271	1463	Yes
3	Clark Avenue and US101 SB Ramps	AM	35.1	E	>100	F	-	987	Yes
		PM	88.1	F	>100	F	-	1098	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	497	Yes
		PM	>100	F	>100	F	-	548	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in XXXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Table 14 – Buildout plus-Project Conditions and Impacts-Roadways Only, Site 1

Roadway Segment			Day of Week	Future Without Project			Future with Project			Significant Impact
				ADT	V/C	LOS	ADT	V/C	LOS	
1	Clark Avenue, from Bradley Road to Stillwell Road		Weekday	20,600	0.430	A	27,864	0.582	A	No
2	Clark Avenue, from Stillwell Road to US 101		Weekday	18,500	0.386	A	27,264	0.569	A	No
3	Stillwell Road, South of Clark Avenue		Weekday	5,700	0.642	B	6,426	0.724	C	Yes
4	Sunny Hills Road, South of Clark Avenue		Weekday	7,100	0.542	A	7,342	0.561	A	No

Table 15 – Buildout plus-Project Conditions and Impacts, Site 2

Study Intersections		Peak Hour	Pre-Project Buildout		Build Out with Project		Project Only Change in V/C or Delay	Site 2 Project Trips	Site 2 Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.576	A	0.628	B	0.052	209	No
		PM	0.692	B	0.755	C	0.063	248	No
2	Clark Ave and Sunny Hills Rd	AM	0.475	A	0.613	B	0.138	445	No
		PM	0.620	B	0.698	B	0.078	529	No
3	Clark Avenue and US101 SB Ramps	AM	35.1	E	53.1	F	18.0	279	Yes
		PM	88.1	F	>100	F	-	331	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	139	Yes
		PM	>100	F	>100	F	-	166	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Site 2 would create impacts at intersections 3 and 4 under existing baseline conditions, by exceeding the critical threshold in added project trips. The roadway segment on Sunny Hills Road, south of Clark Avenue, would also be impacted, with operations depreciating to LOS F.

Table 16 – Buildout plus-Project Conditions and Impacts-Roadways Only, Site 2



Roadway Segment	Day of Week	Future Without Project			Future with Project			Significant Impact
		ADT	V/C	LOS	ADT	V/C	LOS	
1 Clark Avenue, from Bradley Road to Stillwell Road	Weekday	20,600	0.430	A	24,070	0.503	A	No
2 Clark Avenue, from Stillwell Road to US 101	Weekday	18,500	0.386	A	22,917	0.479	A	No
3 Stillwell Road, South of Clark Avenue	Weekday	5,700	0.642	B	5,878	0.662	B	No
4 Sunny Hills Road, South of Clark Avenue	Weekday	7,100	0.542	A	14,287	1.091	F	Yes

Table 17 – Buildout plus-Project Conditions and Impacts, Site 3

Study Intersections	Peak Hour	Pre-Project Buildout		Build Out with Project		Project Only Change in V/C or Delay	Site 3 Project Trips	Site 3 Sig Impact?
		V/C or Delay	LOS	V/C or Delay	LOS			
1 Clark Ave and Stillwell Rd	AM	0.576	A	0.583	A	0.007	41	No
	PM	0.692	B	0.697	B	0.005	52	No
2 Clark Ave and Sunny Hills Rd	AM	0.475	A	0.494	A	0.019	58	No
	PM	0.620	B	0.627	B	0.007	71	No
3 Clark Avenue and US101 SB Ramps	AM	35.1	F	36.8	E	1.7	29	Yes
	PM	88.1	F	123.6	F	35.5	45	Yes
4 Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	21	Yes
	PM	>100	F	>100	F	-	20	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in XXXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Table 18 – Buildout plus-Project Conditions and Impacts-Roadways Only, Site 3

Roadway Segment	Day of Week	Future Without Project			Future with Project			Significant Impact
		ADT	V/C	LOS	ADT	V/C	LOS	
1 Clark Avenue, from Bradley Road to Stillwell Road	Weekday	20,600	0.430	A	21,078	0.440	A	No
2 Clark Avenue, from Stillwell Road to US 101	Weekday	18,500	0.386	A	18,997	0.397	A	No
3 Stillwell Road, South of Clark Avenue	Weekday	5,700	0.642	B	5,998	0.676	B	No
4 Sunny Hills Road, South of Clark Avenue	Weekday	7,100	0.542	A	7,797	0.595	A	No

The proposed Project at site 3 would create impacts at two of the four study intersections under future baseline conditions. No roadway segments would experience significant impacts.

Future Cumulative Analysis

The future cumulative analysis conducted by KOA provided a review of the combined impacts of all three project sites. This scenario assumed the completion of all improvements incorporated into future baseline conditions along with all roadway improvements specific to each of the project sites. Table 19 provides the analysis for the study intersections, and Table 20 provides the analysis for the study roadway segments.

Table 19 – Cumulative plus-Project Conditions Intersection Impacts, All Sites



Study Intersections		Peak Hour	Pre-Project Buildout		Buildout with Project Cumulative		Cum Project Change in V/C or Delay	All Site Project Trips	Cumulative Impact?
			V/C or Delay	LOS	V/C or Delay	LOS			
1	Clark Ave and Stillwell Rd	AM	0.576	A	0.758	C	0.182	848	Yes
		PM	0.692	B	0.895	D	0.203	967	Yes
2	Clark Ave and Sunny Hills Rd	AM	0.475	A	0.783	C	0.308	1819	Yes
		PM	0.620	B	0.973	E	0.353	2063	Yes
3	Clark Avenue and US101 SB Ramps	AM	35.1	F	>100	F	-	1295	Yes
		PM	88.1	F	>100	F	-	1474	Yes
4	Clark Avenue and US101 NB Ramps	AM	>100	F	>100	F	-	657	Yes
		PM	>100	F	>100	F	-	734	Yes

LOS = Level of Service; V/C = Volume to Capacity ratio shown in XXXX format. Delay = Average Vehicle Delay, shown in seconds of delay (X.X).

Table 20 – Cumulative plus-Project Conditions Segment Impacts, All Sites

Roadway Segment			Day of Week	Future Without Project			Future with Project			Significant Impact
				ADT	V/C	LOS	ADT	V/C	LOS	
1	Clark Avenue, from Bradley Road to Stillwell Road		Weekday	21,078	0.440	A	31,812	0.664	B	No
2	Clark Avenue, from Stillwell Road to US 101		Weekday	18,997	0.397	A	32,178	0.672	B	No
3	Stillwell Road, South of Clark Avenue		Weekday	5,998	0.676	B	6,902	0.778	C	Yes
4	Sunny Hills Road, South of Clark Avenue		Weekday	7,797	0.595	A	15,226	1.162	F	Yes

All four study intersections are significantly impacted in the cumulative scenario, are the roadway segments on Stillwell Road and Sunny Hills Road.

2013 Traffic Study review

KOA conducted a review of the main elements of the 2013 Penfield and Smith Traffic Circulation analysis for the Site 3 location. KOA identified potential issues with the analyzed project trip generation, distribution, lane configurations, and roadway segment analysis methodology, as well as with some of the level of service results. As all of these data affect the outcome of the analysis, KOA recommends that revisions or updates to the study be considered.

Future Approach Geometry

- The future geometry lane configurations should have been illustrated in separate diagrams for intersections 2 through 4.
- The future geometry description seems inconsistent: the Project Access diagram (Figure 4-7) only shows a new traffic signal at Sunny Hills Road in the future scenario but the proposed freeway ramp access improvement diagram (Figure 4-9) appears to show traffic signals at intersection 4.
- The “funded network” improvements paragraphs at the beginning of the future conditions section do not discuss the freeway interchange or signal improvements, instead focusing on a roadway extension project outside of the project area. The traffic study would be easier to follow if discussion of proposed study area geometry changes were incorporated.



Project Trip Generation and Assignment

- Generation
 - The trip figure for Planned Unit Development in the EIR is slightly lower than in the 10th edition of the ITE *Trip Generation Manual* (76 AM trips and 95 PM trips from ITE 10th rates as opposed to 70 AM trips and 88 PM trips in the report). This may have been based on an earlier version of the *Trip Generation Manual*, which is likely based on the age of the report.
- Distribution:
 - Based on the surrounding area and location of development, it seems like the percent of trips going west is high, even if it reflects the model volumes. A more realistic percentage, even assuming a high share of local trips, would seem to be 35 to 40 percent, with a higher north/south share.
- Assignment:
 - The total AM assigned trips (in/out of project) add up to 72 while the trip generation table shows 70 trips.
 - The total PM assigned trips add up correctly but there is one more trip out and one less trip in than shown in the trip generation table (56 in, and 32 out)
 - Six project trips disappear and two are added on Clark Avenue between intersections 2 and 3.

Level of Service

Intersection

- Existing conditions
 - LOS at intersection is 2 is very low, compared to the KOA analysis.
- Existing + Project
 - Intersection 2 delay values are much higher in the KOA check calculations
 - Intersection 4 delay values are much higher in the KOA check calculations
- Cumulative Project Analysis:
 - Intersection 4 delay values are much higher in the KOA check calculations.

Roadway

- The Roadway Segment Level of Service (LOS) tables are difficult to interpret without the provision of the volume-to-capacity (V/C) ratios. The LOS C thresholds for the future post-project scenarios range from 6,300 for the Stillwell Road segment to 34,000 for the two Clark Avenue segments, implying segment capacities ranging from 47,887 to 8,873 vehicles per day (based on the standard volume-to-capacity ratio cutoff of .70/.71 for LOS C).
- With these capacities, the post-project roadway segment levels of service for Site 3 buildout should all be in the A to B range, based on our calculations, but the report's post-project table (Table 4.11-11) shows Stillwell Road at LOS C. Including the V/C ratios in this table would allow for a determination as to why those values differ from those calculated by KOA.

Impact Analysis/Determination:

- The discussion of intersection impacts (4.11.3, Sub-section b) should be more focused. Either the report should only list the criteria that were applied in the study (i.e. the V/C and project increases shown in Table 4.11-6) or the report should specify which of the intersection thresholds were applied in the study.



- The roadway segment impact thresholds for the study should be more clearly defined. The discussion of impact standards states that significant impacts on roadways are considered where the "Estimated Future Volume" exceeds the "Acceptable Capacity", without defining what V/C ratio constitutes Acceptable Capacity.



ATTACHMENT A
PROJECT SITES AND TRAFFIC STUDY AREA

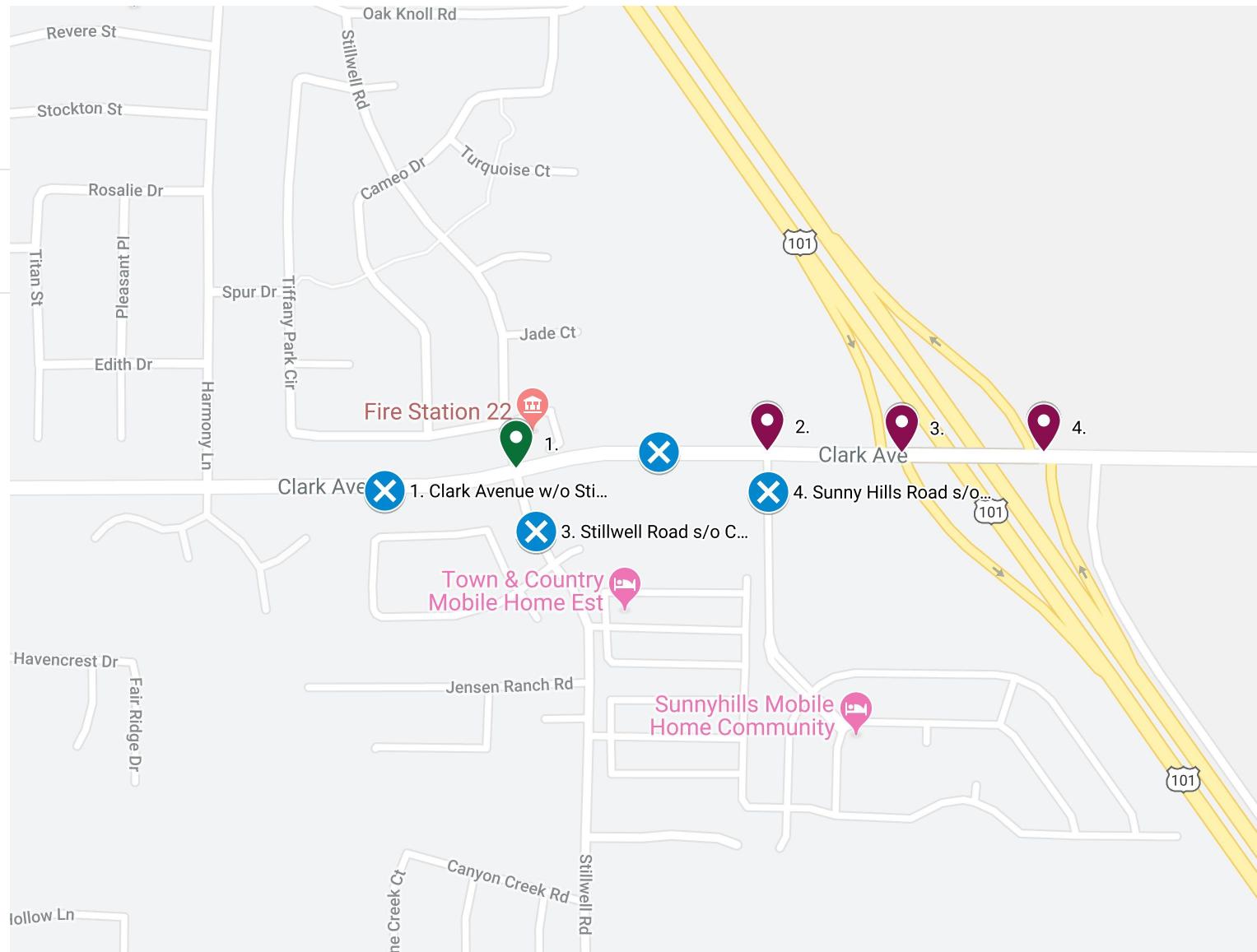
Orcutt Key Sites Map

Intersections

- 📍 Unsignalized
- 📍 Signalized

Segments

- ✖ All items





ATTACHMENT B
TRAFFIC VOLUME INPUTS FROM PREVIOUS STUDY

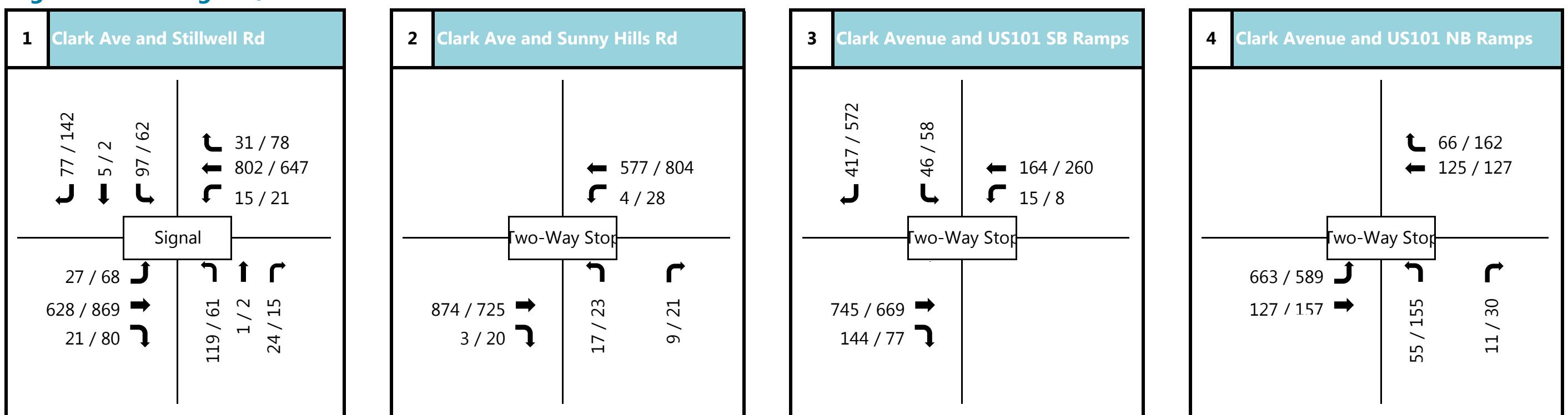
Figure 5 - Existing AM/PM Peak Hour Traffic Volumes

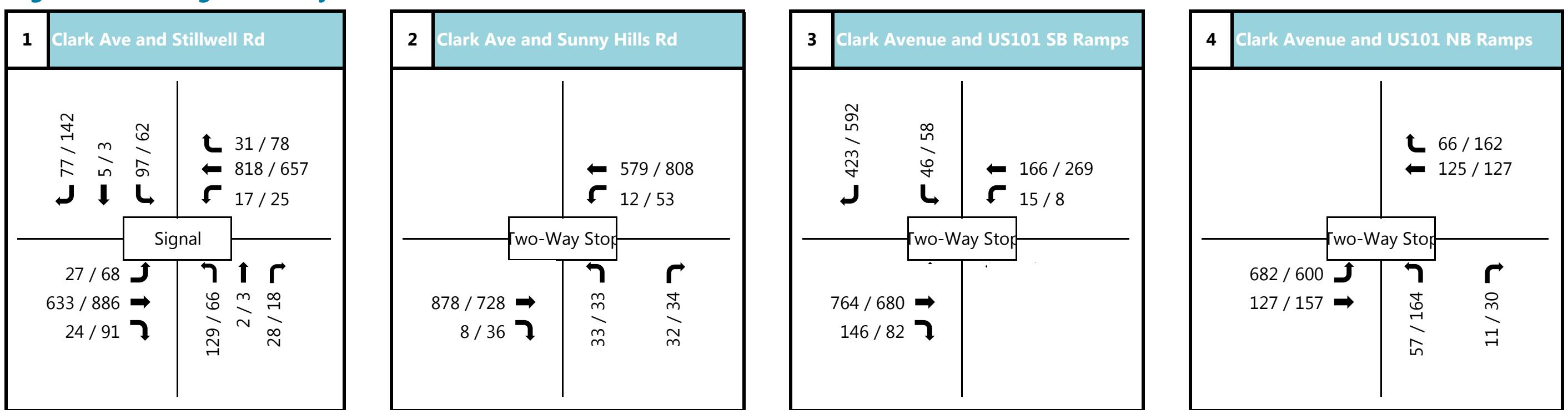
Figure 8 - Existing With-Project - AM/PM Peak Hour Traffic Volumes

Figure 11 - Future Without Project - AM/PM Peak Hour Traffic Volumes

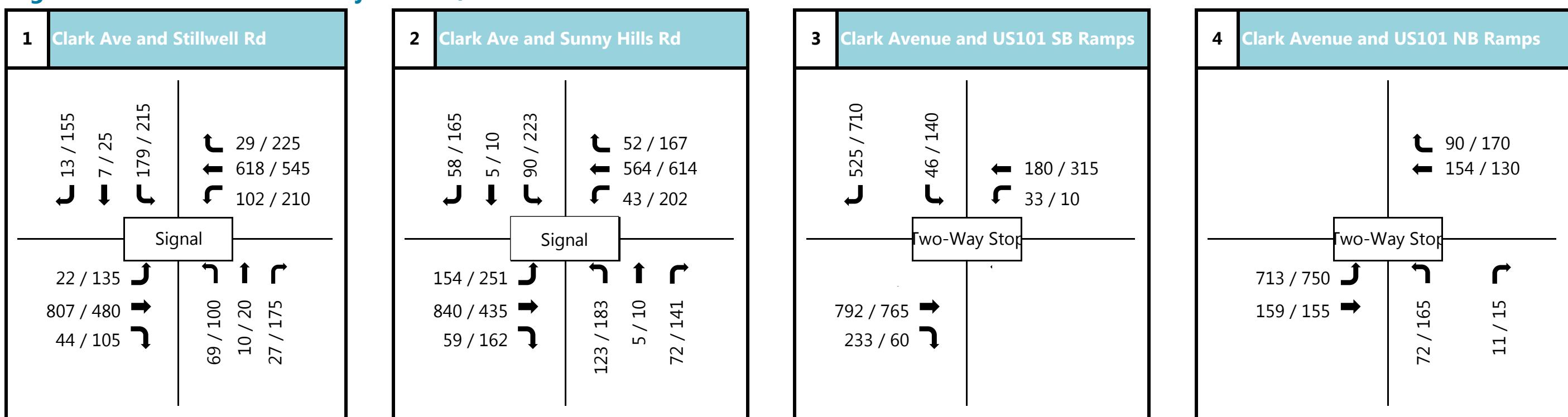
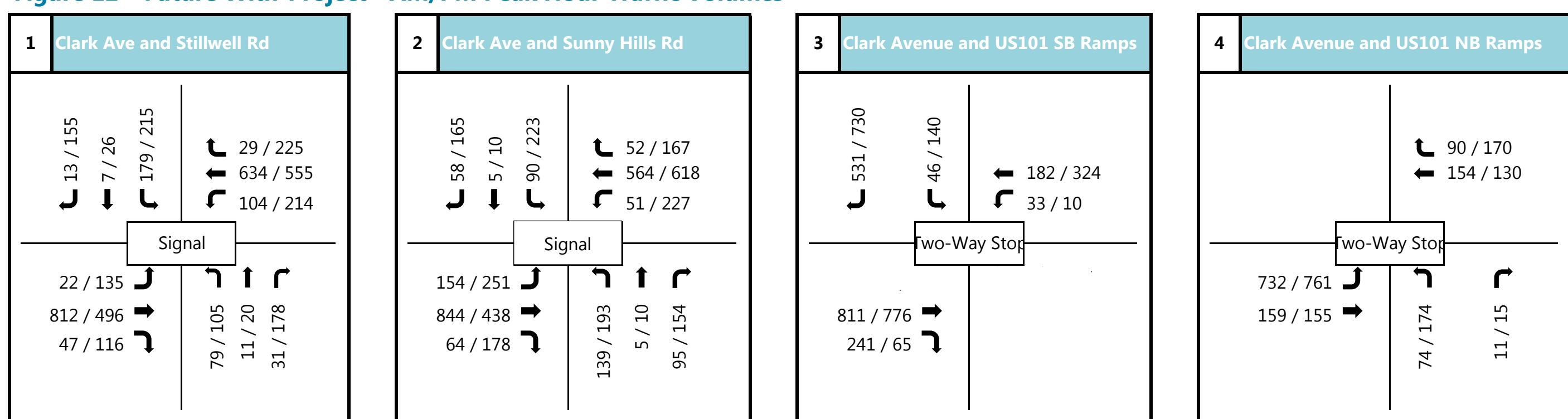


Figure 12 – Future With-Project - AM/PM Peak Hour Traffic Volumes





ATTACHMENT C

LEVEL OF SERVICE WORKSHEETS – EXISTING SCENARIO

Orcutt 3 sites TIS-Site 1

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Scenario 5 Existing plus Project AM

Report File: J:\...\Existing+Proj AM.pdf

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.601	-	B
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.669	-	B
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.060	174.1	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	27.372	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: B
 Volume to Capacity (v/c): 0.601

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	119	1	24	97	5	77	27	628	21	15	802	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	33	41	0	0	0	248	0	16	238	40
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	1	57	138	5	77	27	876	21	31	1040	71
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	0	14	35	1	19	7	219	5	8	260	18
Total Analysis Volume [veh/h]	119	1	57	138	5	77	27	876	21	31	1040	71
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.04	0.04	0.09	0.05	0.05	0.02	0.28	0.28	0.02	0.35	0.35
Intersection LOS	B											
Intersection V/C	0.601											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.669

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	17	5	9	90	5	58	154	874	3	4	577	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	484	13	145	322	0	0	3	122	227
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	5	9	574	18	203	476	874	3	7	699	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	2	144	5	51	119	219	1	2	175	70
Total Analysis Volume [veh/h]	17	5	9	574	18	203	476	874	3	7	699	279
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.18	0.19	0.13	0.15	0.27	0.00	0.00	0.22	0.17
Intersection LOS	B											
Intersection V/C	0.669											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	174.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.060

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	417	0	745	144	15	164	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	371	0	365	119	0	132	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	788	0	1110	263	15	296	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	197	0	278	66	4	74	0
Total Analysis Volume [veh/h]	0	0	0	46	0	788	0	1110	263	15	296	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.53	0.00	1.06	0.00	0.01	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	89.79	0.00	174.12	0.00	0.00	0.00	12.43	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	2.92	0.00	47.30	0.00	0.00	0.00	0.09	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	73.07	0.00	1182.46	0.00	0.00	0.00	2.32	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			169.47			0.00			0.60	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						56.21						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	27.372

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	55	0	11	0	0	0	663	127	0	0	125	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	124	0	0	0	0	0	357	8	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	179	0	11	0	0	0	1020	135	0	0	133	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	0	3	0	0	0	255	34	0	0	33	17
Total Analysis Volume [veh/h]	179	0	11	0	0	0	1020	135	0	0	133	66
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	27.37	0.00	0.01	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	15.07	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	94.55	0.00	94.55	0.00	0.00	0.00	8.27	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2363.63	0.00	2363.63	0.00	0.00	0.00	206.81	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			13.31			0.00	
Approach LOS		F		A			B			A		
d_I, Intersection Delay [s/veh]							1240.52					
Intersection LOS							F					

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Orcutt 3 sites TIS-Site 1

Scenario 5 Existing plus Project AM

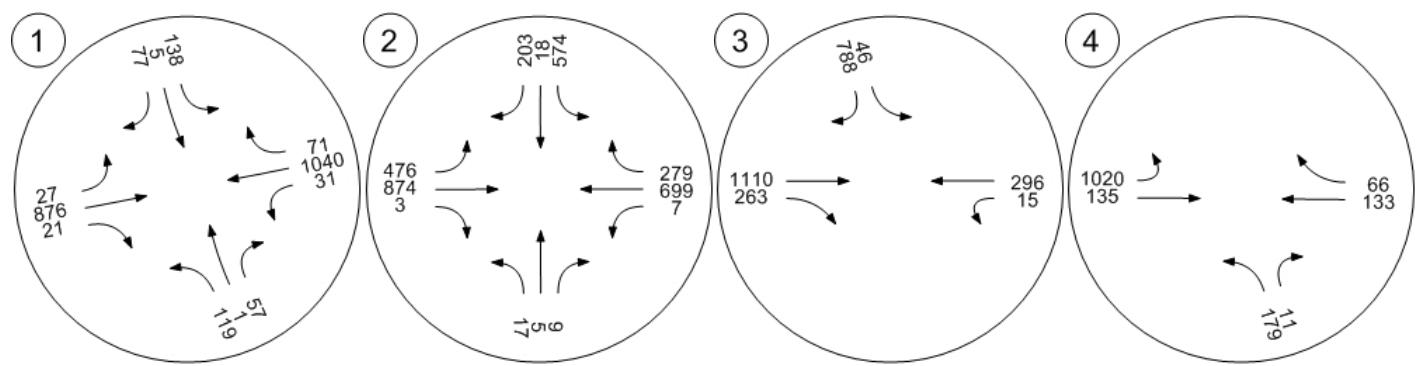
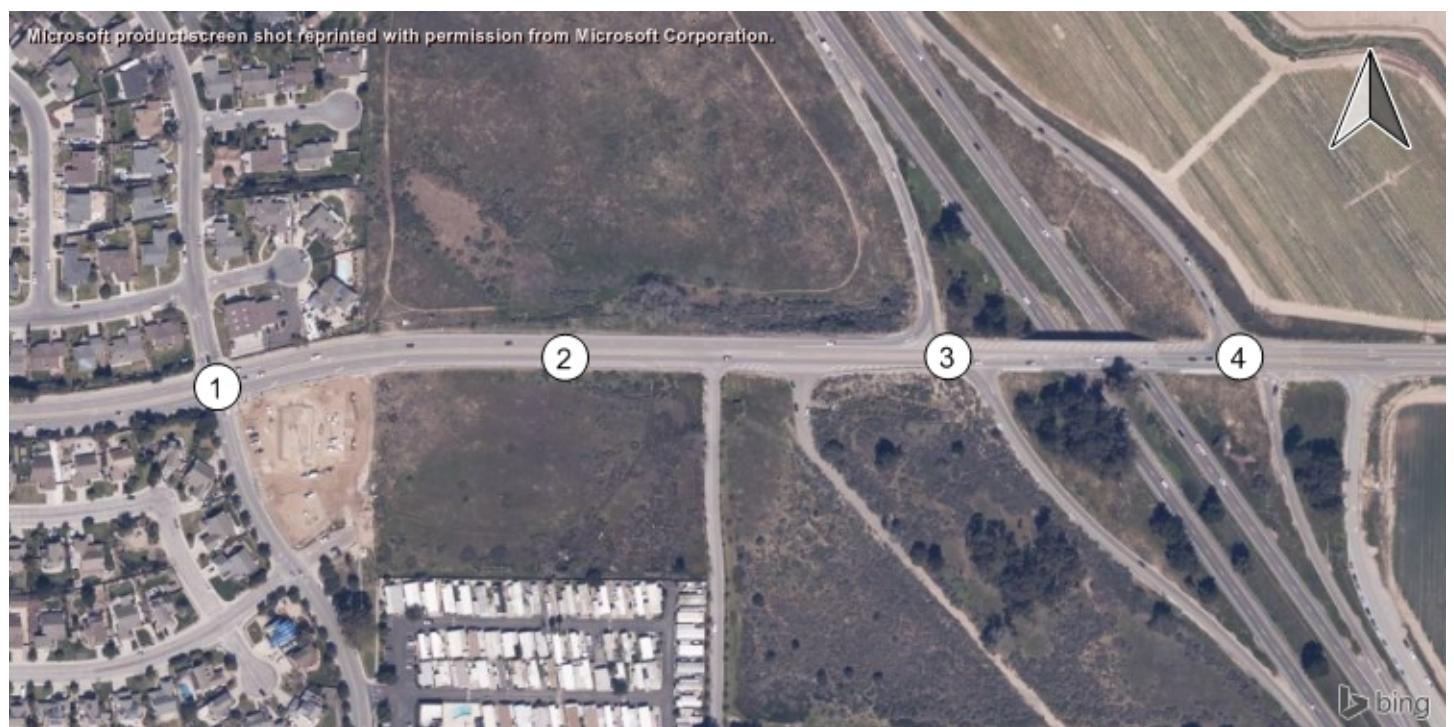
Report File: J:\...\Existing+Proj AM.pdf

11/15/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
9: Project Site 1				1.000	0.000	50.00	50.00	825	794	1619	100.00
Added Trips Total										825	794
Total Trips										1619	100.00

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Scenario 6 Existing plus Project PM

Report File: J:\...\Existing+Proj PM.pdf

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.648	-	B
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	WB Thru	0.773	-	C
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.543	1,003.0	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	51.584	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: B
 Volume to Capacity (v/c): 0.648

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	61	2	15	62	2	142	68	869	80	21	647	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	47	0	0	0	280	0	18	261	44
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	2	52	109	2	142	68	1149	80	39	908	122
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	1	13	27	1	36	17	287	20	10	227	31
Total Analysis Volume [veh/h]	61	2	52	109	2	142	68	1149	80	39	908	122
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.03	0.03	0.07	0.09	0.09	0.04	0.38	0.38	0.02	0.32	0.32
Intersection LOS	B											
Intersection V/C	0.648											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.773

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	23	5	21	90	5	58	154	725	20	28	804	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	530	14	160	364	0	0	4	135	256
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	5	21	620	19	218	518	725	20	32	939	308
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	5	155	5	55	130	181	5	8	235	77
Total Analysis Volume [veh/h]	23	5	21	620	19	218	518	725	20	32	939	308
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.19	0.20	0.14	0.16	0.23	0.01	0.02	0.29	0.19
Intersection LOS	C											
Intersection V/C	0.773											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	1,003.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.543

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	58	0	572	0	669	77	8	260	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	419	0	399	131	0	149	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	58	0	991	0	1068	208	8	409	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	0	248	0	267	52	2	102	0
Total Analysis Volume [veh/h]	0	0	0	58	0	991	0	1068	208	8	409	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.69	0.00	1.54	0.00	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	128.59	0.00	1003.00	0.00	0.00	0.00	11.71	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	4.80	0.00	182.44	0.00	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	120.05	0.00	4561.02	0.00	0.00	0.00	1.12	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			954.65			0.00			0.22	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						365.25						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	51.584

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	155	0	30	0	0	0	589	157	0	0	127	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	140	0	0	0	0	0	390	9	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	295	0	30	0	0	0	979	166	0	0	136	162
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	0	8	0	0	0	245	42	0	0	34	41
Total Analysis Volume [veh/h]	295	0	30	0	0	0	979	166	0	0	136	162
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	51.58	0.00	0.03	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	17.44	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	162.35	0.00	162.35	0.00	0.00	0.00	9.67	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4058.86	0.00	4058.86	0.00	0.00	0.00	241.86	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			14.91			0.00	
Approach LOS		F		A			B			A		
d_I, Intersection Delay [s/veh]							1847.89					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Scenario 6 Existing plus Project PM

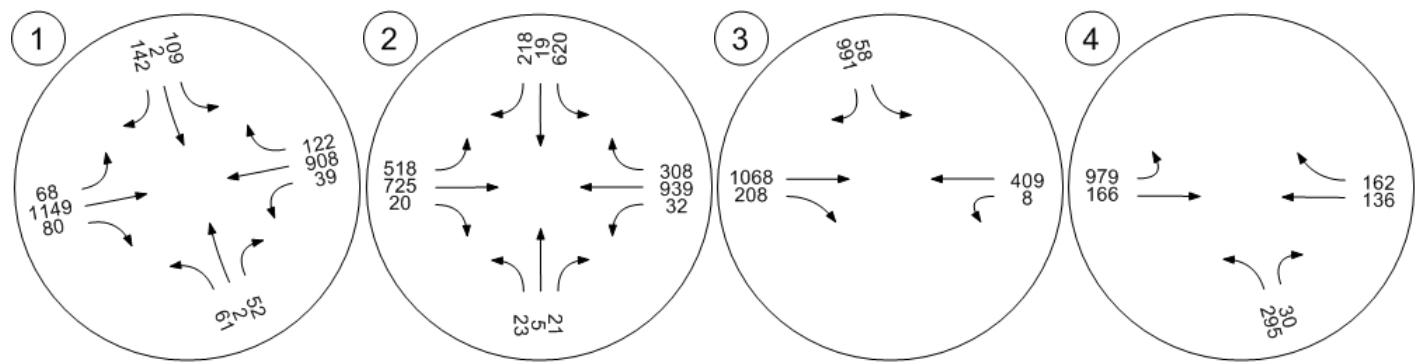
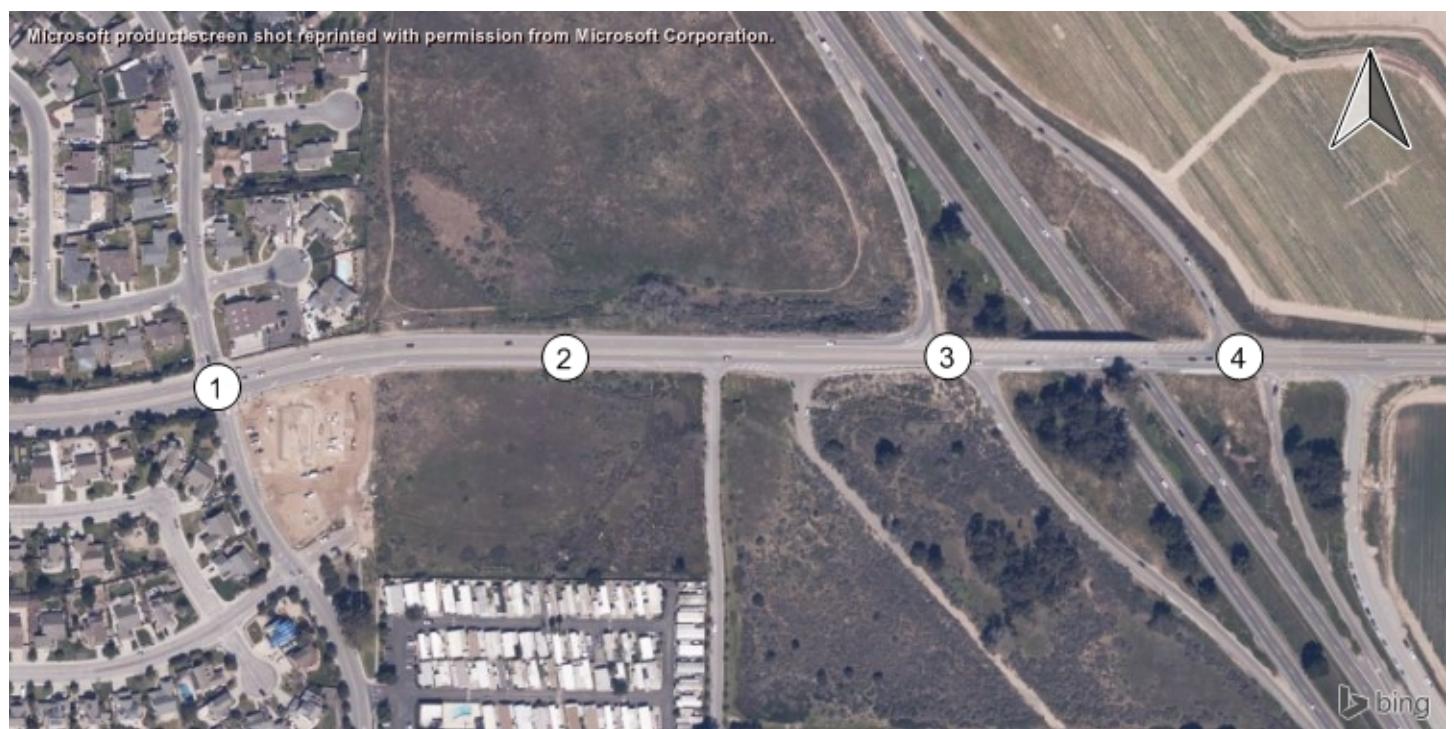
Report File: J:\...\Existing+Proj PM.pdf

11/15/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
9: Project Site 1				1.000	0.000	50.00	50.00	932	870	1802	100.00
Added Trips Total										932	870

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Scenario 5 Existing plus Project AM

Report File: J:\...\Ex+Proj AM_v2.pdf

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.551	-	A
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.527	-	A
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	0.294	37.5	E
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	4.227	6,150.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.551

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	119	1	24	97	5	77	27	628	21	15	802	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	16	0	0	0	114	0	5	104	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	1	30	113	5	77	27	742	21	20	906	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	0	8	28	1	19	7	186	5	5	227	12
Total Analysis Volume [veh/h]	119	1	30	113	5	77	27	742	21	20	906	46
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.02	0.02	0.07	0.05	0.05	0.02	0.24	0.24	0.01	0.30	0.30
Intersection LOS	A											
Intersection V/C	0.551											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.527

Intersection Setup

Name							
Approach	Northbound		Eastbound		Westbound		
Lane Configuration							
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Pocket	1	1	1	1	2	0	
Pocket Length [ft]	100.00	100.00	240.00	115.00	155.00	100.00	
Speed [mph]	15.00		30.00		30.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	No		No		No		

Volumes

Name						
Base Volume Input [veh/h]	17	9	874	3	4	577
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	124	101	105	43	182	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	141	110	979	46	186	577
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	28	245	12	47	144
Total Analysis Volume [veh/h]	141	110	979	46	186	577
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90					
Lost time [s]	10.00					

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	4	0	6	0	0	2
Auxiliary Signal Groups						
Lead / Lag	Lag	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.05	0.31	0.03	0.06	0.18
Intersection LOS	A					
Intersection V/C	0.527					

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	37.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.294

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	417	0	745	144	15	164	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	130	0	121	45	0	52	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	547	0	866	189	15	216	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	137	0	217	47	4	54	0
Total Analysis Volume [veh/h]	0	0	0	46	0	547	0	866	189	15	216	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.29	0.00	0.66	0.00	0.01	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	37.47	0.00	17.88	0.00	0.00	0.00	10.58	0.00	0.00
Movement LOS				E		C		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.22	0.00	5.69	0.00	0.00	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	30.51	0.00	142.32	0.00	0.00	0.00	1.74	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			19.40			0.00			0.69	
Approach LOS		A		C			A			A		
d_I, Intersection Delay [s/veh]						6.21						
Intersection LOS						E						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	6,150.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	4.227

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	55	0	11	0	0	0	663	127	0	0	125	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	0	0	0	0	0	118	3	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	0	11	0	0	0	781	130	0	0	128	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	0	3	0	0	0	195	33	0	0	32	17
Total Analysis Volume [veh/h]	104	0	11	0	0	0	781	130	0	0	128	66
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	4.23	0.00	0.01	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	6150.03	0.00	6007.63	0.00	0.00	0.00	11.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	47.56	0.00	47.56	0.00	0.00	0.00	3.87	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1189.05	0.00	1189.05	0.00	0.00	0.00	96.68	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		6136.41			0.00			9.43			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]						585.48						
Intersection LOS							F					

Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Scenario 5 Existing plus Project AM

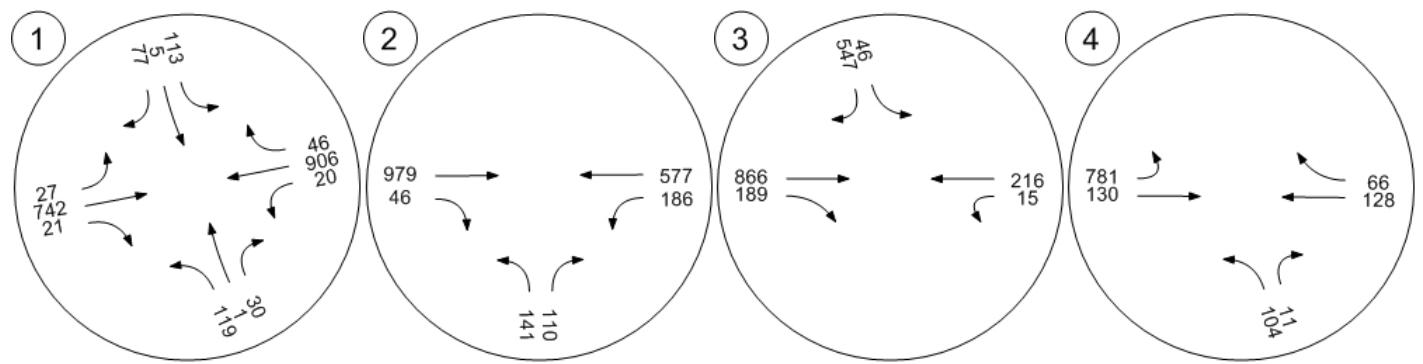
Report File: J:\...\Ex+Proj AM_v2.pdf

11/18/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
8: Project Site 2				1.000	0.000	50.00	50.00	325	297	622	100.00	
Added Trips Total									325	297	622	100.00

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Report File: J:\...\Ex+Proj PM_v2.pdf

Scenario 11 Existing plus Project PM

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.595	-	A
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.455	-	A
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.011	116.2	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	8.965	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.595

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	61	2	15	62	2	142	68	869	80	21	647	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	19	0	0	0	135	0	7	131	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	61	2	22	81	2	142	68	1004	80	28	778	97
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	1	6	20	1	36	17	251	20	7	195	24
Total Analysis Volume [veh/h]	61	2	22	81	2	142	68	1004	80	28	778	97
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.02	0.05	0.09	0.09	0.04	0.34	0.34	0.02	0.27	0.27
Intersection LOS	A											
Intersection V/C	0.595											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.455

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	1	1	1	2	0
Pocket Length [ft]	100.00	100.00	240.00	115.00	155.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	23	21	725	20	28	804
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	2.00	2.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	157	128	129	51	217	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	180	149	854	71	245	804
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	37	214	18	61	201
Total Analysis Volume [veh/h]	180	149	854	71	245	804
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Cycle Length [s]	90					
Lost time [s]	10.00					

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	0	0	6	0	0	2
Auxiliary Signal Groups						
Lead / Lag	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.27	0.04	0.08	0.25
Intersection LOS	A					
Intersection V/C	0.455					

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	116.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.011

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	58	0	572	0	669	77	8	260	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	155	0	154	56	0	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	58	0	727	0	823	133	8	322	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	0	182	0	206	33	2	81	0
Total Analysis Volume [veh/h]	0	0	0	58	0	727	0	823	133	8	322	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.38	0.00	1.01	0.00	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	42.60	0.00	116.18	0.00	0.00	0.00	10.06	0.00	0.00
Movement LOS				E		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.76	0.00	35.11	0.00	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	44.02	0.00	877.83	0.00	0.00	0.00	0.84	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			110.74			0.00			0.24	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						42.02						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	8.965

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	155	0	30	0	0	0	589	157	0	0	127	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	0	0	0	0	150	4	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	213	0	30	0	0	0	739	161	0	0	131	162
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	0	8	0	0	0	185	40	0	0	33	41
Total Analysis Volume [veh/h]	213	0	30	0	0	0	739	161	0	0	131	162
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	8.96	0.00	0.03	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	11.78	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	111.27	0.00	111.27	0.00	0.00	0.00	4.12	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2781.84	0.00	2781.84	0.00	0.00	0.00	103.05	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			9.67			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1698.26					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 2

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Scenario 11 Existing plus Project PM

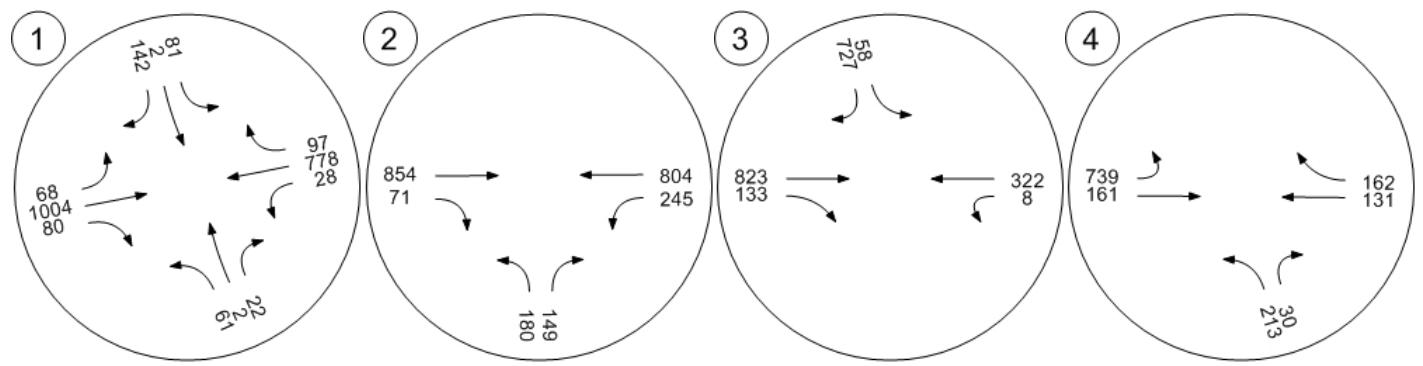
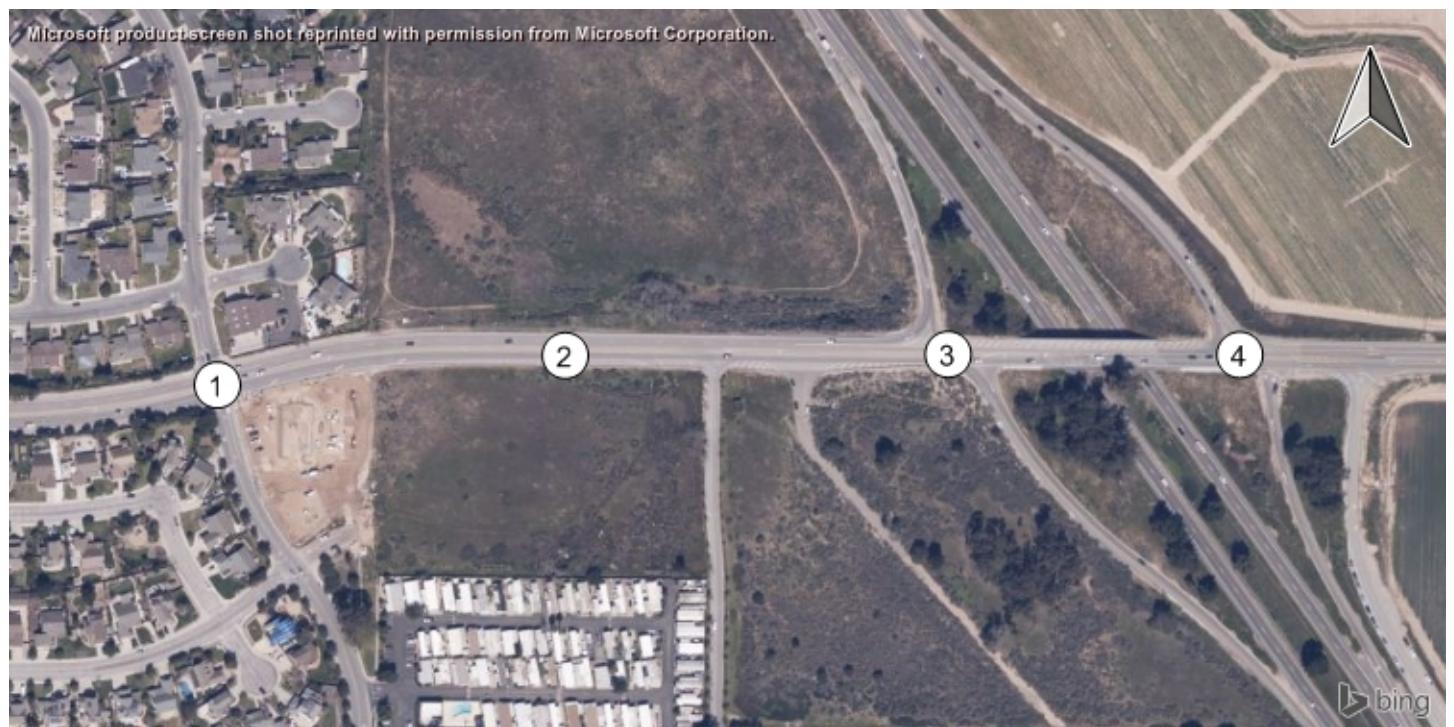
Report File: J:\...\Ex+Proj PM_v2.pdf

11/18/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
8: Project Site 2				1.000	0.000	50.00	50.00	387	375	762	100.00
Added Trips Total										387	375

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS

Vistro File: J:\...\Site_3_v5.vistro

Scenario 3 Existing Plus Project AM

Report File: J:\...\Exsiting With Project AMf.pdf

11/14/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.525	-	A
2	Clark Ave/ Sunny Hills Rd	Two-way stop	HCM 6th Edition	NB Left	0.243	40.8	E
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	0.223	27.4	D
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	1.424	1,079.5	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.525

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	129	2	28	97	5	77	27	633	24	17	818	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	2	28	97	5	77	27	633	24	17	818	31
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	1	7	24	1	19	7	158	6	4	205	8
Total Analysis Volume [veh/h]	129	2	28	97	5	77	27	633	24	17	818	31
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.02	0.02	0.06	0.05	0.05	0.02	0.21	0.21	0.01	0.27	0.27
Intersection LOS	A											
Intersection V/C	0.525											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Two-way stop	Delay (sec / veh):	40.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.243

Intersection Setup

Name							
Approach	Northbound		Eastbound		Westbound		
Lane Configuration							
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Pocket	0	0	0	1	1	0	
Pocket Length [ft]	100.00	100.00	100.00	115.00	155.00	100.00	
Speed [mph]	15.00		30.00		30.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	No		No		No		

Volumes

Name						
Base Volume Input [veh/h]	33	32	878	8	12	579
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	32	878	8	12	579
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	8	220	2	3	145
Total Analysis Volume [veh/h]	33	32	878	8	12	579
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.09	0.01	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	40.78	24.65	0.00	0.00	9.79	0.00
Movement LOS	E	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.48	1.48	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	36.95	36.95	0.00	0.00	1.20	0.00
d_A, Approach Delay [s/veh]	32.84		0.00		0.20	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]			1.46			
Intersection LOS			E			

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	27.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.223

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	423	0	764	146	15	166	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	423	0	764	146	15	166	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	106	0	191	37	4	42	0
Total Analysis Volume [veh/h]	0	0	0	46	0	423	0	764	146	15	166	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.22	0.00	0.48	0.00	0.01	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.42	0.00	12.89	0.00	0.00	0.00	9.91	0.00	0.00
Movement LOS				D		B		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.85	0.00	2.75	0.00	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	21.27	0.00	68.84	0.00	0.00	0.00	1.53	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			14.32			0.00			0.82	
Approach LOS		A		B			A			A		
d_I, Intersection Delay [s/veh]						4.40						
Intersection LOS						D						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	1,079.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.424

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	57	0	11	0	0	0	682	127	0	0	125	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	57	0	11	0	0	0	682	127	0	0	125	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	3	0	0	0	171	32	0	0	31	17
Total Analysis Volume [veh/h]	57	0	11	0	0	0	682	127	0	0	125	66
Pedestrian Volume [ped/h]	0			0			0			0		

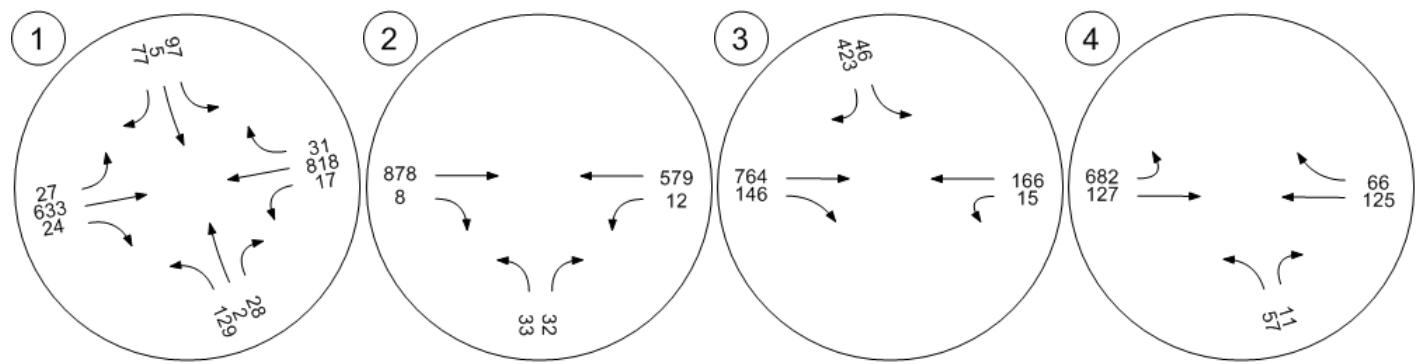
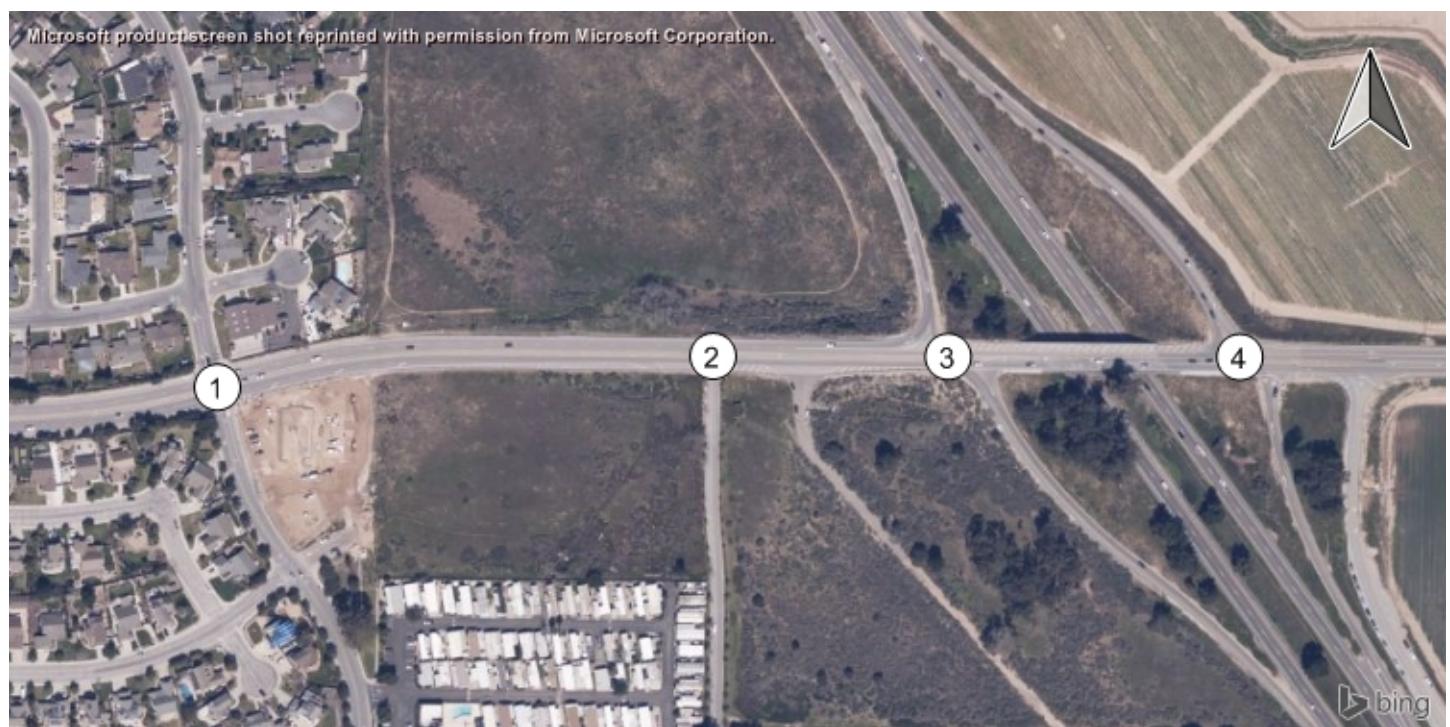
Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.42	0.00	0.01	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	1079.51	0.00	993.46	0.00	0.00	0.00	10.13	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	16.50	0.00	16.50	0.00	0.00	0.00	2.90	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	412.62	0.00	412.62	0.00	0.00	0.00	72.41	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		1065.59			0.00			8.54			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]						74.32						
Intersection LOS							F					

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS

Vistro File: J:\...\Site_3_v5.vistro

Scenario 4 Existing Plus Project PM

Report File: J:\...\Exsiting With Project PM.pdf

11/14/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.564	-	A
2	Clark Ave/ Sunny Hills Rd	Two-way stop	HCM 6th Edition	NB Left	0.320	54.1	F
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	0.266	27.5	D
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	3.430	4,604.6	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.564

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	66	3	18	62	3	142	68	886	91	25	657	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	3	18	62	3	142	68	886	91	25	657	78
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	1	5	16	1	36	17	222	23	6	164	20
Total Analysis Volume [veh/h]	66	3	18	62	3	142	68	886	91	25	657	78
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.01	0.01	0.04	0.09	0.09	0.04	0.31	0.31	0.02	0.23	0.23
Intersection LOS	A											
Intersection V/C	0.564											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Two-way stop	Delay (sec / veh):	54.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.320

Intersection Setup

Name							
Approach	Northbound		Eastbound		Westbound		
Lane Configuration							
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Pocket	0	0	0	1	1	0	
Pocket Length [ft]	100.00	100.00	100.00	115.00	155.00	100.00	
Speed [mph]	15.00		30.00		30.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	No		No		No		

Volumes

Name						
Base Volume Input [veh/h]	33	34	728	36	53	808
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	34	728	36	53	808
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	9	182	9	13	202
Total Analysis Volume [veh/h]	33	34	728	36	53	808
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.32	0.08	0.01	0.00	0.06	0.01
d_M, Delay for Movement [s/veh]	54.12	27.69	0.00	0.00	9.52	0.00
Movement LOS	F	D	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.93	1.93	0.00	0.00	0.20	0.00
95th-Percentile Queue Length [ft/ln]	48.25	48.25	0.00	0.00	4.99	0.00
d_A, Approach Delay [s/veh]	40.71		0.00		0.59	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]			1.91			
Intersection LOS			F			

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	27.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.266

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	58	0	592	0	680	82	8	269	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	58	0	592	0	680	82	8	269	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	0	148	0	170	21	2	67	0
Total Analysis Volume [veh/h]	0	0	0	58	0	592	0	680	82	8	269	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.27	0.00	0.77	0.00	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.51	0.00	24.72	0.00	0.00	0.00	9.27	0.00	0.00
Movement LOS				D		C		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.07	0.00	9.07	0.00	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	26.87	0.00	226.75	0.00	0.00	0.00	0.71	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			24.97			0.00			0.27	
Approach LOS		A		C			A			A		
d_I, Intersection Delay [s/veh]						9.65						
Intersection LOS						D						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	4,604.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	3.430

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	265.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	164	0	30	0	0	0	600	157	0	0	127	162
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	164	0	30	0	0	0	600	157	0	0	127	162
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	0	8	0	0	0	150	39	0	0	32	41
Total Analysis Volume [veh/h]	164	0	30	0	0	0	600	157	0	0	127	162
Pedestrian Volume [ped/h]	0			0			0			0		

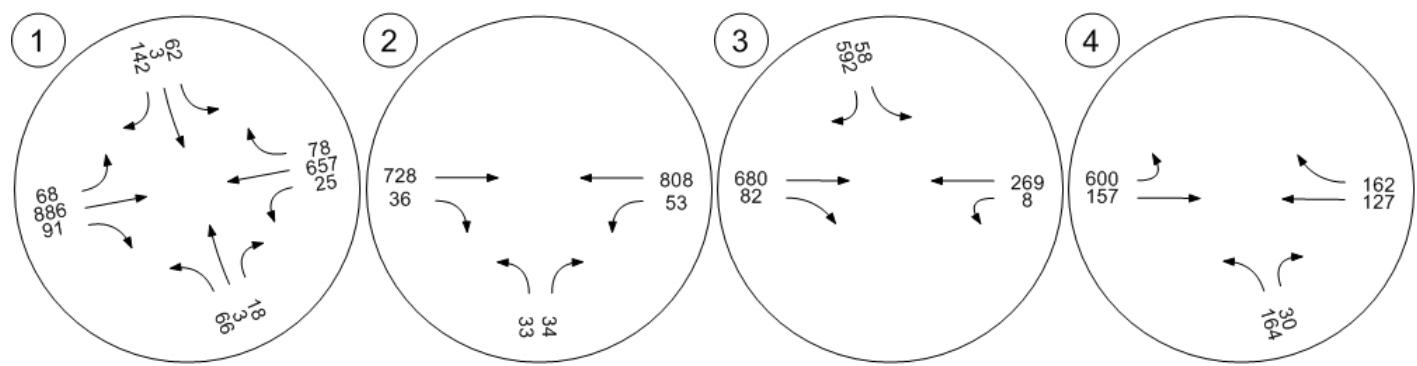
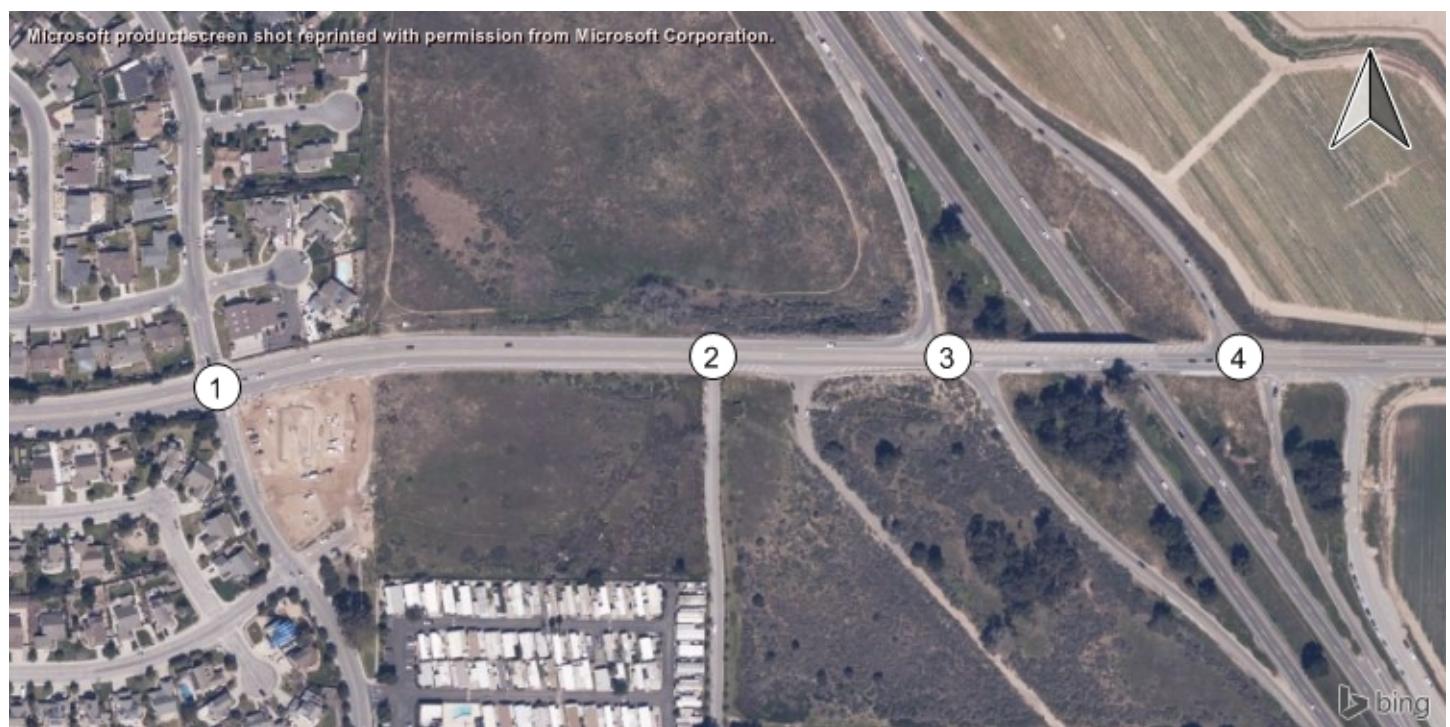
Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	3.43	0.00	0.03	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	4604.55	0.00	4533.30	0.00	0.00	0.00	10.34	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	72.99	0.00	72.99	0.00	0.00	0.00	2.65	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1824.67	0.00	1824.67	0.00	0.00	0.00	66.35	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		4593.53			0.00			8.20			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							723.67					
Intersection LOS							F					

Traffic Volume - Future Total Volume





ATTACHMENT D
LEVEL OF SERVICE WORKSHEETS – FUTURE SCENARIO

Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Report File: J:\...\Buildout with Proj AMv2.pdf

Scenario 9 Future Buildout w pAM

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.710	-	C
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.699	-	B
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.230	449.6	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	55.532	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.710

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	69	10	27	179	7	13	22	807	44	102	618	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	33	41	0	0	0	248	0	16	238	40
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	10	60	220	7	13	22	1055	44	118	856	69
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	3	15	55	2	3	6	264	11	30	214	17
Total Analysis Volume [veh/h]	69	10	60	220	7	13	22	1055	44	118	856	69
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.04	0.04	0.14	0.01	0.01	0.01	0.34	0.34	0.07	0.29	0.29
Intersection LOS	C											
Intersection V/C	0.710											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.699

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	123	5	72	90	5	58	154	840	59	43	564	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	484	13	145	322	0	0	3	122	227
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	123	5	72	574	18	203	476	840	59	46	686	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	1	18	144	5	51	119	210	15	12	172	70
Total Analysis Volume [veh/h]	123	5	72	574	18	203	476	840	59	46	686	279
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.04	0.05	0.18	0.19	0.13	0.15	0.26	0.04	0.03	0.21	0.17
Intersection LOS	B											
Intersection V/C	0.699											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	449.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.230

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	525	0	792	233	33	180	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	371	0	365	119	0	132	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	896	0	1157	352	33	312	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	224	0	289	88	8	78	0
Total Analysis Volume [veh/h]	0	0	0	46	0	896	0	1157	352	33	312	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.70	0.00	1.23	0.00	0.01	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	163.93	0.00	449.58	0.00	0.00	0.00	13.77	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	4.68	0.00	97.65	0.00	0.00	0.00	0.24	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	117.00	0.00	2441.37	0.00	0.00	0.00	6.03	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			435.63			0.00			1.32	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						146.93						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	55.532

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	72	0	11	0	0	0	713	159	0	0	154	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	124	0	0	0	0	0	357	8	0	0	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	196	0	11	0	0	0	1070	167	0	0	162	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	0	3	0	0	0	268	42	0	0	41	23
Total Analysis Volume [veh/h]	196	0	11	0	0	0	1070	167	0	0	162	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	55.53	0.00	0.01	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	9.75	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	104.60	0.00	104.60	0.00	0.00	0.00	2.11	1.57	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2615.12	0.00	2615.12	0.00	0.00	0.00	52.70	39.15	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			8.44			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1226.67					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Report File: J:\...\Buildout with Proj AMv2.pdf

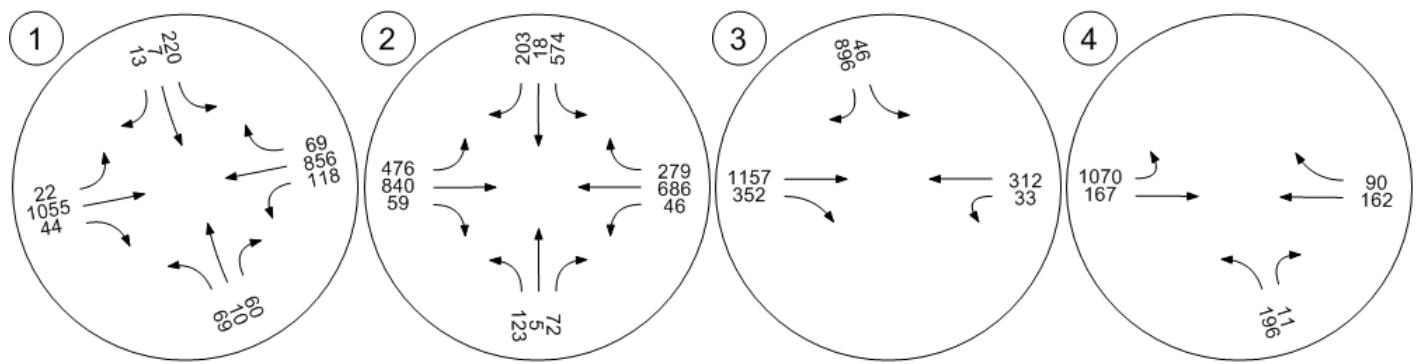
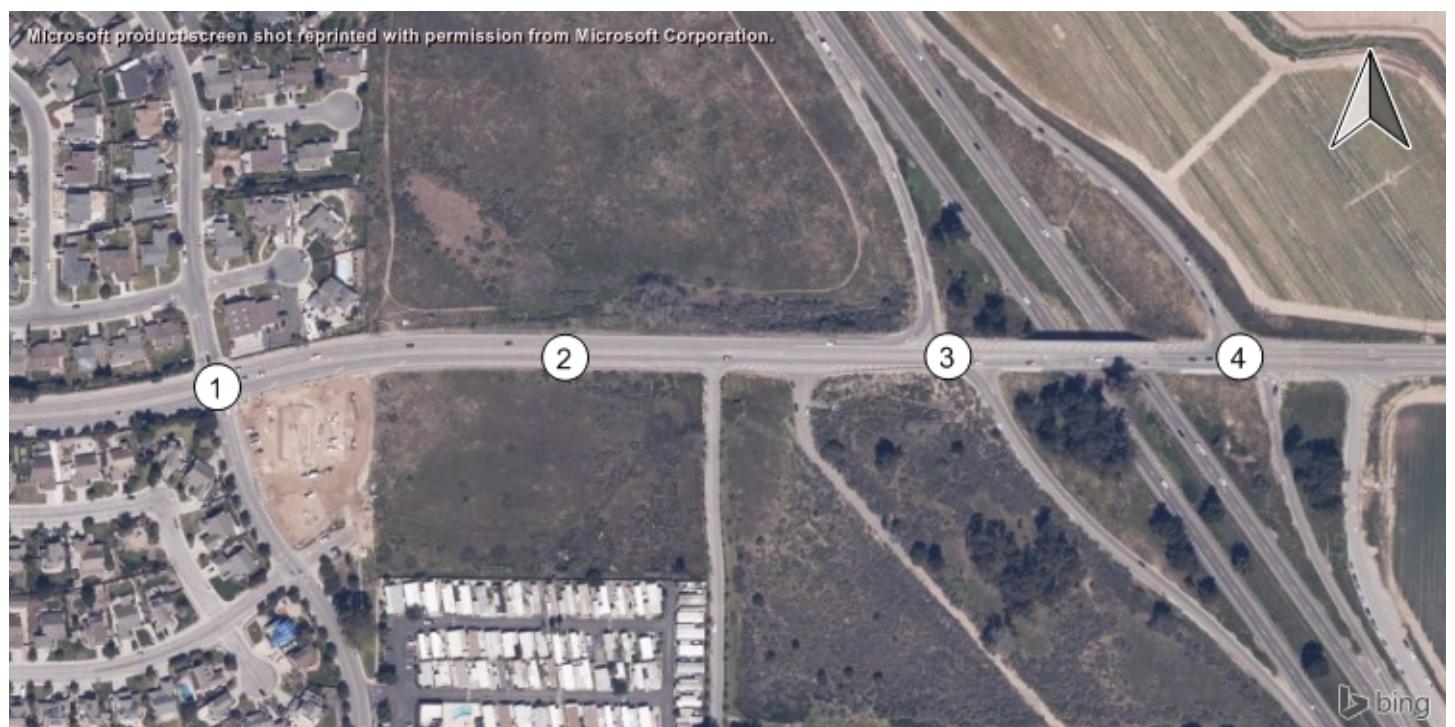
Scenario 9 Future Buildout w pAM

11/15/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
9: Project Site 1				1.000	0.000	50.00	50.00	825	794	1619	100.00
Added Trips Total										825	794
Total Trips										1619	100.00

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Scenario 10 Future Buildout wp PM

Report File: J:\...\Buildout with Proj PMv2.pdf

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.840	-	D
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	WB Right	0.891	-	D
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	2.107	2,150.0	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	232.547	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: D
 Volume to Capacity (v/c): 0.840

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	100	20	175	215	25	155	135	480	105	210	545	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	37	47	0	0	0	280	0	18	261	44
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	20	212	262	25	155	135	760	105	228	806	269
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	5	53	66	6	39	34	190	26	57	202	67
Total Analysis Volume [veh/h]	100	20	212	262	25	155	135	760	105	228	806	269
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.15	0.15	0.16	0.11	0.11	0.08	0.27	0.27	0.14	0.34	0.34
Intersection LOS	D											
Intersection V/C	0.840											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.891

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	183	10	141	223	10	165	251	435	162	202	614	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	530	14	160	364	0	0	4	135	256
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	183	10	141	753	24	325	615	435	162	206	749	423
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	46	3	35	188	6	81	154	109	41	52	187	106
Total Analysis Volume [veh/h]	183	10	141	753	24	325	615	435	162	206	749	423
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.06	0.09	0.24	0.24	0.20	0.19	0.14	0.10	0.13	0.23	0.26
Intersection LOS	D											
Intersection V/C	0.891											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	2,150.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	2.107

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	140	0	710	0	765	60	10	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	419	0	399	131	0	149	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	140	0	1129	0	1164	191	10	464	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	35	0	282	0	291	48	3	116	0
Total Analysis Volume [veh/h]	0	0	0	140	0	1129	0	1164	191	10	464	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	2.11	0.00	1.89	0.00	0.01	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2150.02	0.00	1621.14	0.00	0.00	0.00	12.23	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	41.80	0.00	271.65	0.00	0.00	0.00	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1045.02	0.00	6791.37	0.00	0.00	0.00	1.51	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			1679.49			0.00			0.26	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						687.99						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	232.547

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	165	0	15	0	0	0	750	155	0	0	130	170
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	140	0	0	0	0	0	390	9	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	305	0	15	0	0	0	1140	164	0	0	139	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	76	0	4	0	0	0	285	41	0	0	35	43
Total Analysis Volume [veh/h]	305	0	15	0	0	0	1140	164	0	0	139	170
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	232.55	0.00	0.02	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	10.44	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	162.27	0.00	162.27	0.00	0.00	0.00	2.57	1.91	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4056.75	0.00	4056.75	0.00	0.00	0.00	64.20	47.70	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			9.13			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1661.62					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 1

Vistro File: J:\...\Site_1_v1.vistro

Scenario 10 Future Buildout wp PM

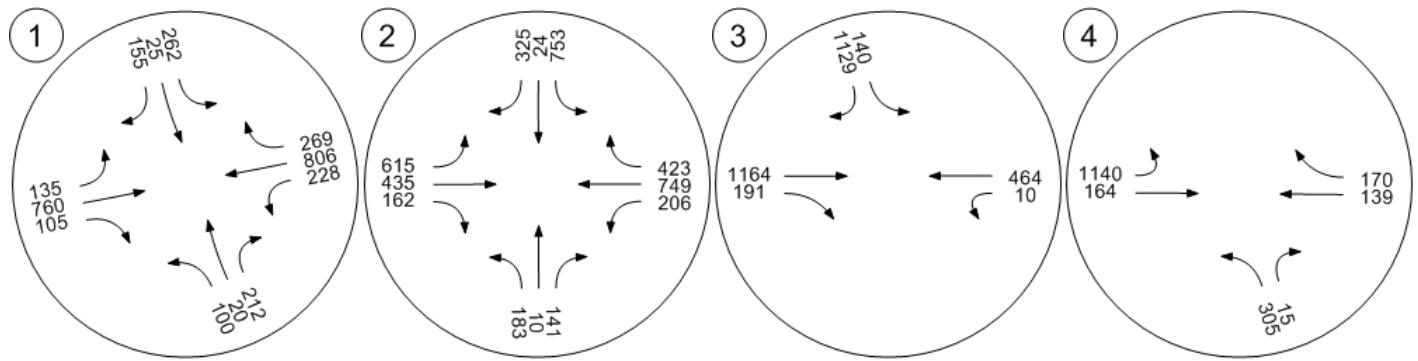
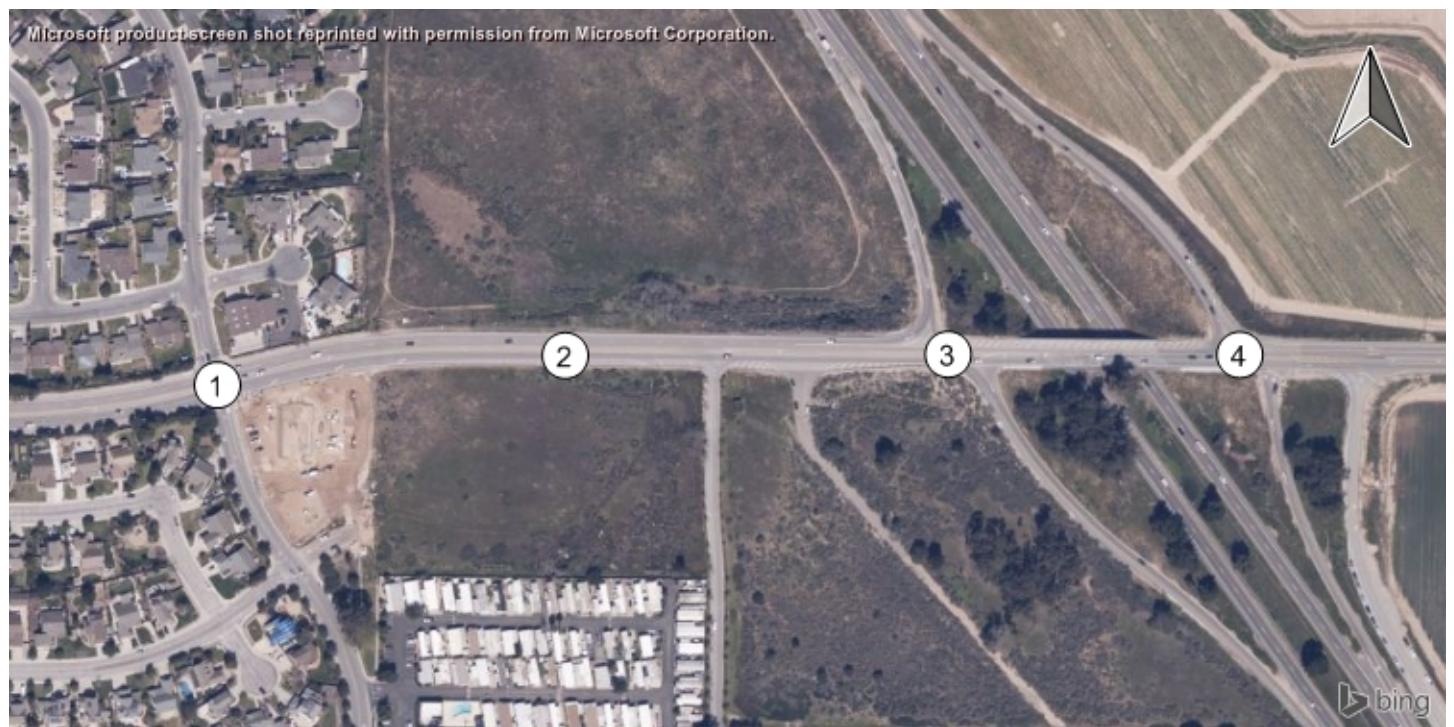
Report File: J:\...\Buildout with Proj PMv2.pdf

11/15/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
9: Project Site 1				1.000	0.000	50.00	50.00	932	870	1802	100.00
Added Trips Total										932	870

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Report File: J:\...\Buildout+Proj AMv2.pdf

Scenario 12 12 Buildout with Project AM

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.628	-	B
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.613	-	B
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	0.382	53.1	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	7.651	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: B
 Volume to Capacity (v/c): 0.628

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	69	10	27	179	7	13	22	807	44	102	618	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	16	0	0	0	114	0	5	104	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	69	10	33	195	7	13	22	921	44	107	722	44
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	3	8	49	2	3	6	230	11	27	181	11
Total Analysis Volume [veh/h]	69	10	33	195	7	13	22	921	44	107	722	44
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.03	0.03	0.12	0.01	0.01	0.01	0.30	0.30	0.07	0.24	0.24
Intersection LOS	B											
Intersection V/C	0.628											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.613

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	2	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	123	5	72	90	5	58	154	840	59	43	564	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	124	0	101	0	0	0	0	105	43	182	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	247	5	173	90	5	58	154	945	102	225	564	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	1	43	23	1	15	39	236	26	56	141	13
Total Analysis Volume [veh/h]	247	5	173	90	5	58	154	945	102	225	564	52
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.08	0.11	0.03	0.03	0.04	0.10	0.30	0.06	0.07	0.18	0.03
Intersection LOS	B											
Intersection V/C	0.613											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	53.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.382

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	525	0	792	233	33	180	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	130	0	121	45	0	52	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	655	0	913	278	33	232	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	164	0	228	70	8	58	0
Total Analysis Volume [veh/h]	0	0	0	46	0	655	0	913	278	33	232	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.38	0.00	0.81	0.00	0.01	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	53.08	0.00	27.68	0.00	0.00	0.00	11.51	0.00	0.00
Movement LOS				F		D		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.77	0.00	11.25	0.00	0.00	0.00	0.18	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	44.25	0.00	281.29	0.00	0.00	0.00	4.47	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			29.35			0.00			1.43	
Approach LOS		A		D			A			A		
d_I, Intersection Delay [s/veh]							9.71					
Intersection LOS							F					

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	7.651

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	72	0	11	0	0	0	713	159	0	0	154	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	0	0	0	0	0	118	3	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	0	11	0	0	0	831	162	0	0	157	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	0	3	0	0	0	208	41	0	0	39	23
Total Analysis Volume [veh/h]	121	0	11	0	0	0	831	162	0	0	157	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	7.65	0.00	0.01	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	9.09	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	60.65	0.00	60.65	0.00	0.00	0.00	1.41	1.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1516.30	0.00	1516.30	0.00	0.00	0.00	35.26	25.43	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			7.60			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							967.60					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Report File: J:\...\Buildout+Proj AMv2.pdf

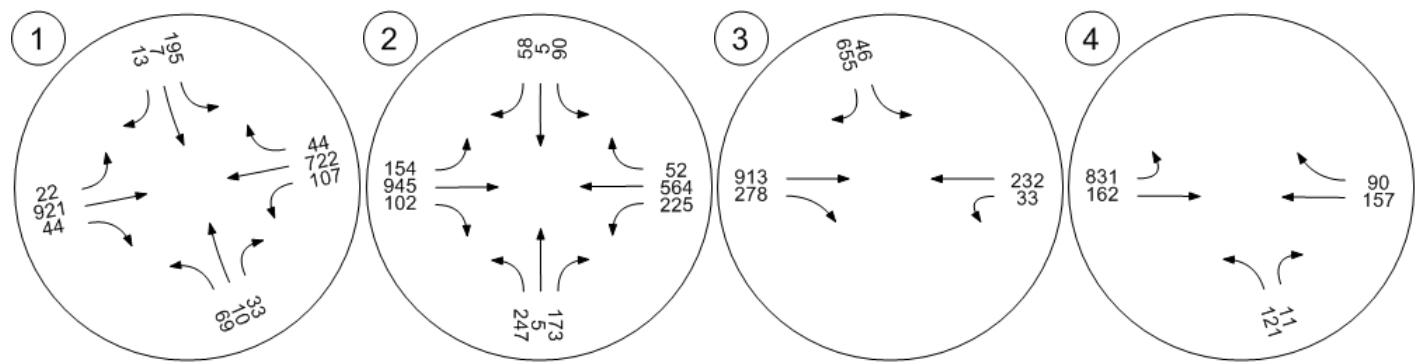
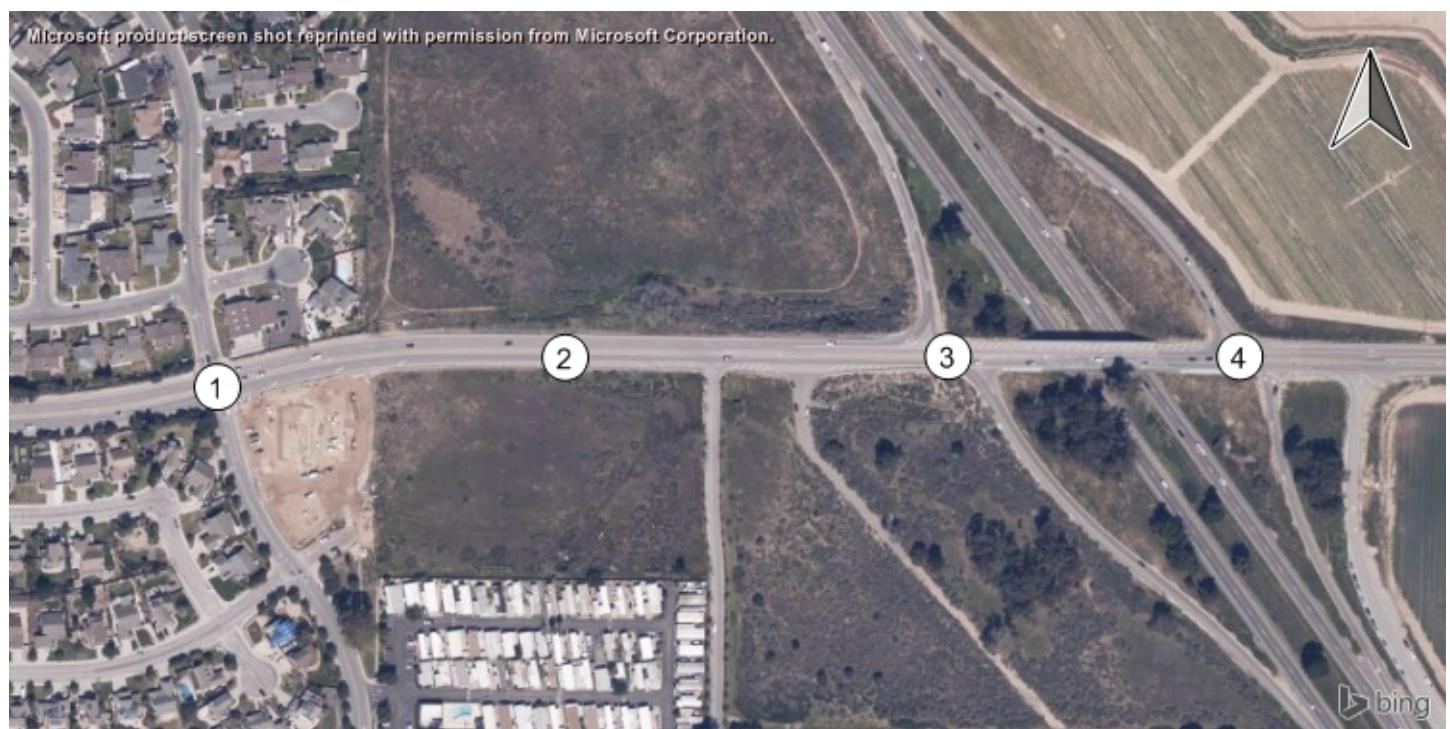
Scenario 12 12 Buildout with Project AM

11/18/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
8: Project Site 2				1.000	0.000	50.00	50.00	325	297	622	100.00	
Added Trips Total									325	297	622	100.00

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Scenario 13 Buildout with Project PM

Report File: J:\...\Buildout+Proj PMv2.pdf

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.755	-	C
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	WB Thru	0.698	-	B
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.292	558.5	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	23.593	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.755

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	100	20	175	215	25	155	135	480	105	210	545	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	7	19	0	0	0	135	0	7	131	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	100	20	182	234	25	155	135	615	105	217	676	244
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	5	46	59	6	39	34	154	26	54	169	61
Total Analysis Volume [veh/h]	100	20	182	234	25	155	135	615	105	217	676	244
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.13	0.13	0.15	0.11	0.11	0.08	0.23	0.23	0.14	0.29	0.29
Intersection LOS	C											
Intersection V/C	0.755											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.698

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	2	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	183	10	141	223	10	165	251	435	162	202	614	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	157	0	128	0	0	0	0	129	51	217	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	340	10	269	223	10	165	251	564	213	419	614	167
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	3	67	56	3	41	63	141	53	105	154	42
Total Analysis Volume [veh/h]	340	10	269	223	10	165	251	564	213	419	614	167
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.11	0.17	0.07	0.07	0.10	0.16	0.18	0.13	0.13	0.19	0.10
Intersection LOS	B											
Intersection V/C	0.698											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	558.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.292

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	140	0	710	0	765	60	10	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	155	0	154	56	0	62	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	140	0	865	0	919	116	10	377	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	35	0	216	0	230	29	3	94	0
Total Analysis Volume [veh/h]	0	0	0	140	0	865	0	919	116	10	377	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.16	0.00	1.29	0.00	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	462.56	0.00	558.49	0.00	0.00	0.00	10.44	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	20.01	0.00	109.55	0.00	0.00	0.00	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	500.13	0.00	2738.74	0.00	0.00	0.00	1.13	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			545.13			0.00			0.27	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						225.78						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	23.593

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	165	0	15	0	0	0	750	155	0	0	130	170
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	58	0	0	0	0	0	150	4	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	223	0	15	0	0	0	900	159	0	0	134	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	0	4	0	0	0	225	40	0	0	34	43
Total Analysis Volume [veh/h]	223	0	15	0	0	0	900	159	0	0	134	170
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	23.59	0.00	0.02	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	9.58	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	117.01	0.00	117.01	0.00	0.00	0.00	1.71	1.25	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2925.27	0.00	2925.27	0.00	0.00	0.00	42.77	31.26	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			8.14			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1491.96					
Intersection LOS							F					

Orcutt 3 sites TIS-Site 2

Vistro File: J:\...\Site_2_v2.vistro

Scenario 13 Buildout with Project PM

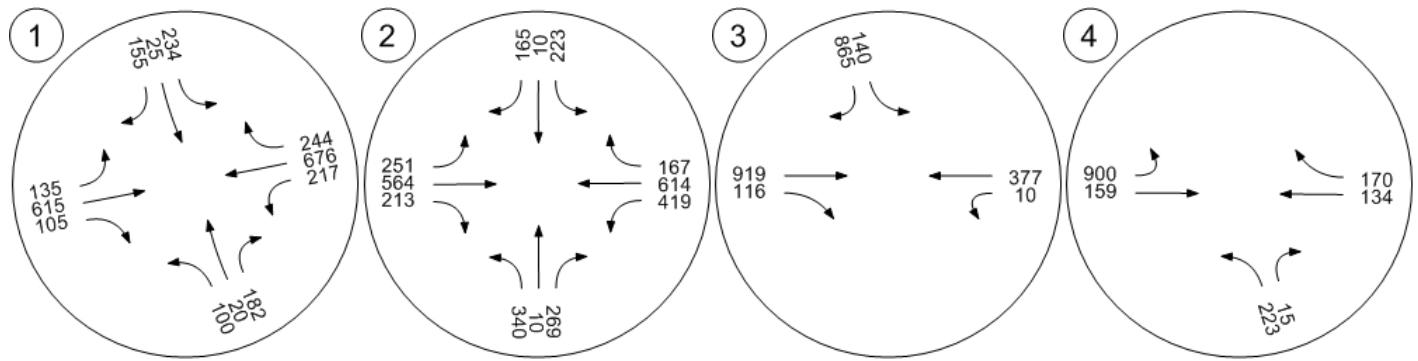
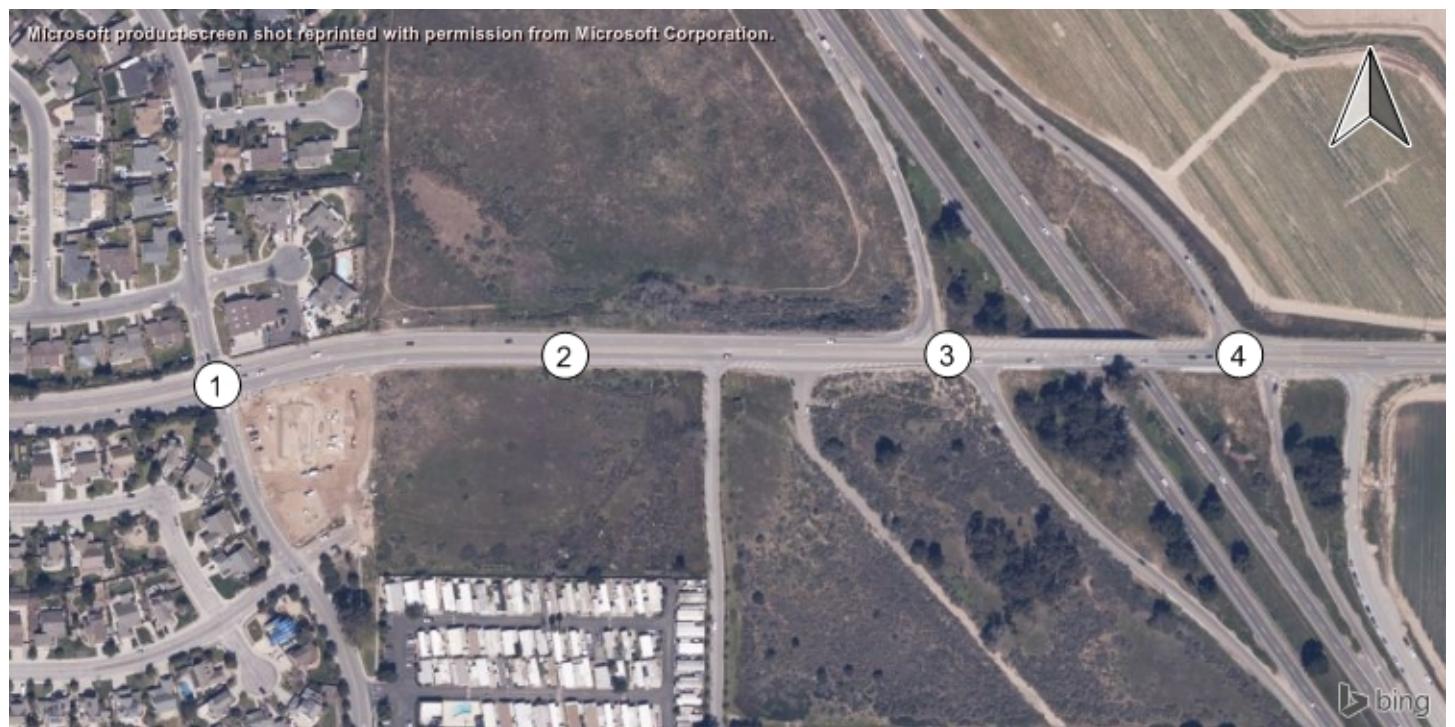
Report File: J:\...\Buildout+Proj PMv2.pdf

11/18/2019

Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
8: Project Site 2				1.000	0.000	50.00	50.00	387	375	762	100.00
Added Trips Total										387	375

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS

Vistro File: J:\...\Site_3_v5.vistro

Scenario 5 Build- Out Plus Project AM

Report File: J:\...\Buildout with Project AM.pdf

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.583	-	A
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.494	-	A
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	0.289	36.8	E
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	2.778	3,538.4	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.583

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	79	11	31	179	7	13	22	812	47	104	634	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	11	31	179	7	13	22	812	47	104	634	29
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	3	8	45	2	3	6	203	12	26	159	7
Total Analysis Volume [veh/h]	79	11	31	179	7	13	22	812	47	104	634	29
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.03	0.03	0.11	0.01	0.01	0.01	0.27	0.27	0.07	0.21	0.21
Intersection LOS	A											
Intersection V/C	0.583											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.494

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	139	5	95	90	5	58	154	844	64	51	564	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	139	5	95	90	5	58	154	844	64	51	564	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	1	24	23	1	15	39	211	16	13	141	13
Total Analysis Volume [veh/h]	139	5	95	90	5	58	154	844	64	51	564	52
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.05	0.06	0.03	0.03	0.04	0.10	0.26	0.04	0.03	0.18	0.03
Intersection LOS	A											
Intersection V/C	0.494											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	36.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.289

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	531	0	811	241	33	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	531	0	811	241	33	182	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	133	0	203	60	8	46	0
Total Analysis Volume [veh/h]	0	0	0	46	0	531	0	811	241	33	182	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.29	0.00	0.62	0.00	0.01	0.00	0.05	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	36.82	0.00	15.86	0.00	0.00	0.00	10.73	0.00	0.00
Movement LOS				E		C		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.20	0.00	4.70	0.00	0.00	0.00	0.16	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	29.92	0.00	117.50	0.00	0.00	0.00	3.93	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			17.53			0.00			1.65	
Approach LOS		A		C			A			A		
d_I, Intersection Delay [s/veh]						5.68						
Intersection LOS						E						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	3,538.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	2.778

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	74	0	11	0	0	0	732	159	0	0	154	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	74	0	11	0	0	0	732	159	0	0	154	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	0	3	0	0	0	183	40	0	0	39	23
Total Analysis Volume [veh/h]	74	0	11	0	0	0	732	159	0	0	154	90
Pedestrian Volume [ped/h]	0			0			0			0		

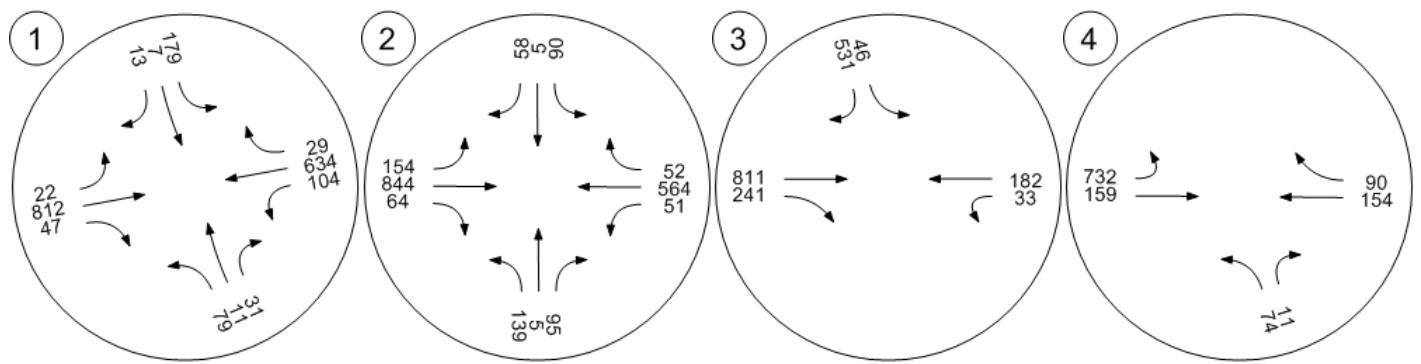
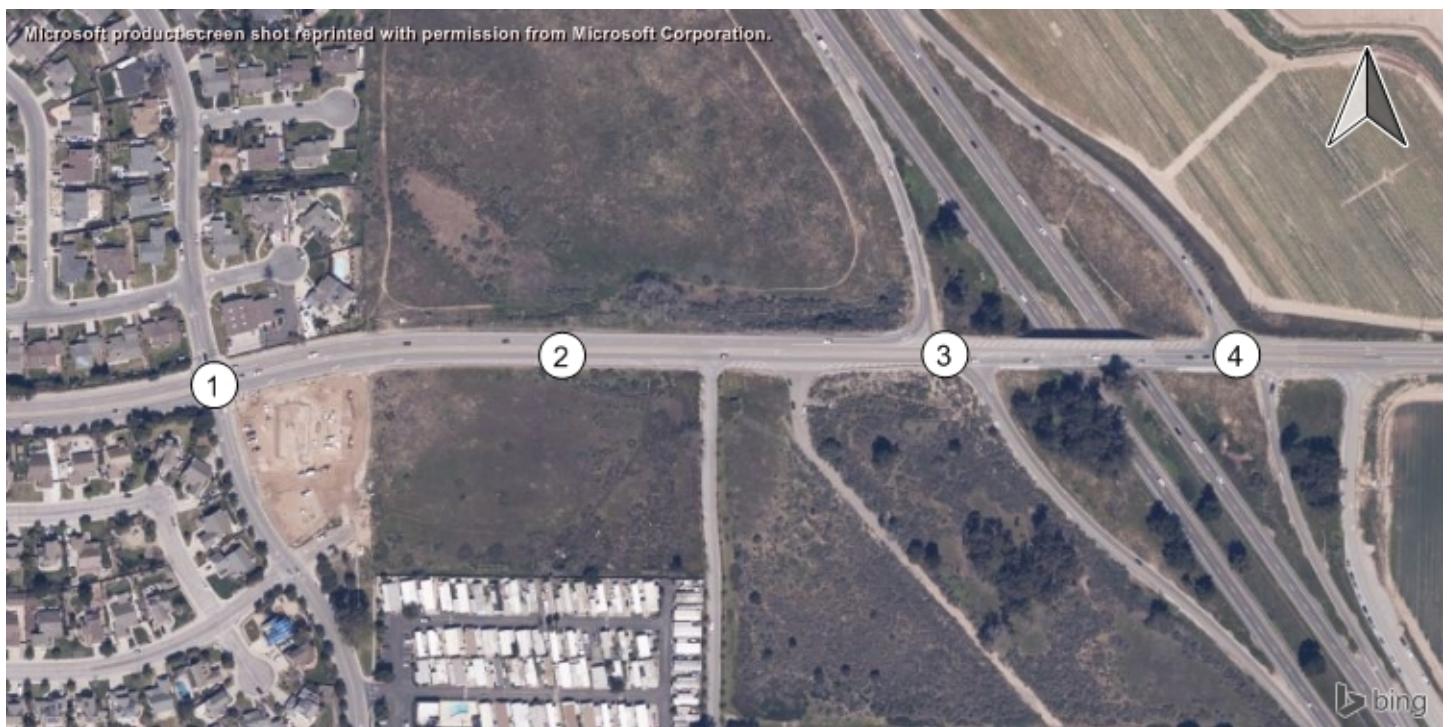
Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	2.78	0.00	0.01	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	3538.36	0.00	3407.25	0.00	0.00	0.00	8.86	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	31.34	0.00	31.34	0.00	0.00	0.00	1.17	0.83	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	783.49	0.00	783.49	0.00	0.00	0.00	29.35	20.71	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		3521.39			0.00			7.28			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]						250.66						
Intersection LOS							F					

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS

Vistro File: J:\...\Site_3_v5.vistro

Scenario 10 10 6 Buildout Plus Project PM

Report File: J:\...\Buildout with Project PM.pdf

11/15/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Right	0.697	-	B
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	WB Thru	0.627	-	B
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.018	123.6	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	8.242	10,000.0	F
9	New Intersection	Unknown	?		?	?	?

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: B
 Volume to Capacity (v/c): 0.697

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	105	20	178	215	26	155	135	496	116	214	555	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	20	178	215	26	155	135	496	116	214	555	225
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	5	45	54	7	39	34	124	29	54	139	56
Total Analysis Volume [veh/h]	105	20	178	215	26	155	135	496	116	214	555	225
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.12	0.12	0.13	0.11	0.11	0.08	0.19	0.19	0.13	0.24	0.24
Intersection LOS	B											
Intersection V/C	0.697											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.627

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	193	10	154	223	10	165	251	438	178	227	618	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	193	10	154	223	10	165	251	438	178	227	618	167
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	3	39	56	3	41	63	110	45	57	155	42
Total Analysis Volume [veh/h]	193	10	154	223	10	165	251	438	178	227	618	167
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.06	0.10	0.07	0.07	0.10	0.16	0.14	0.11	0.14	0.19	0.10
Intersection LOS	B											
Intersection V/C	0.627											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	123.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.018

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	140	0	730	0	776	65	10	324	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	140	0	730	0	776	65	10	324	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	35	0	183	0	194	16	3	81	0
Total Analysis Volume [veh/h]	0	0	0	140	0	730	0	776	65	10	324	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.81	0.00	1.02	0.00	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	100.01	0.00	123.59	0.00	0.00	0.00	9.59	0.00	0.00
Movement LOS				F		F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	8.51	0.00	36.49	0.00	0.00	0.00	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	212.68	0.00	912.26	0.00	0.00	0.00	0.96	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			119.79			0.00			0.29	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						51.01						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	8.242

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	174	0	15	0	0	0	761	155	0	0	130	170
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	174	0	15	0	0	0	761	155	0	0	130	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	44	0	4	0	0	0	190	39	0	0	33	43
Total Analysis Volume [veh/h]	174	0	15	0	0	0	761	155	0	0	130	170
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	8.24	0.00	0.02	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	9.19	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	86.34	0.00	86.34	0.00	0.00	0.00	1.33	0.95	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2158.54	0.00	2158.54	0.00	0.00	0.00	33.13	23.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			7.64			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1350.17					
Intersection LOS							F					

Intersection Level Of Service Report**Intersection 9: New Intersection**

Control Type: Unknown
 Analysis Method: ?
 Analysis Period: 1 hour

Delay (sec / veh): ?
 Level Of Service: ?
 Volume to Capacity (v/c): ?

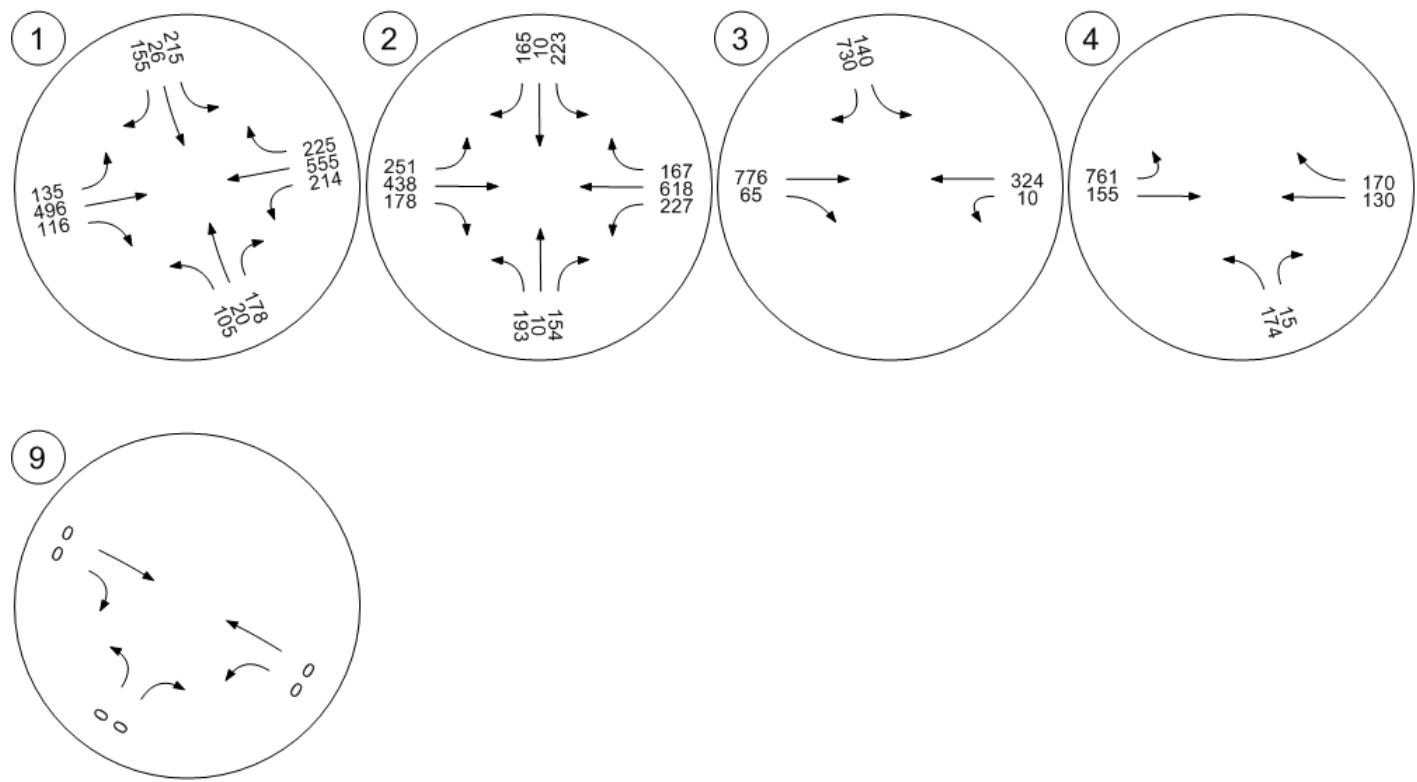
Intersection Setup

Name					
Approach	Northbound		Eastbound		Westbound
Lane Configuration					
Turning Movement	Left	Right	Thru	Right	Left
Crosswalk	Yes		Yes		Yes

Volumes

Name					
Base Volume Input [veh/h]	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0
Presence of On-Street Parking	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

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Report File: J:\...\Cum+Projs AMv2.pdf

Scenario 14 Cumulative with Project AM

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	EB Thru	0.758	-	C
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	EB Thru	0.783	-	C
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Right	1.519	960.6	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Left	263.956	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.758

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	79	11	31	179	7	13	22	812	47	104	634	29
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	21	57	0	0	0	362	0	21	342	55
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	11	52	236	7	13	22	1174	47	125	976	84
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	3	13	59	2	3	6	294	12	31	244	21
Total Analysis Volume [veh/h]	79	11	52	236	7	13	22	1174	47	125	976	84
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.04	0.04	0.15	0.01	0.01	0.01	0.38	0.38	0.08	0.33	0.33
Intersection LOS	C											
Intersection V/C	0.758											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.783

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	2	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	139	5	95	90	5	58	154	844	64	51	564	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	124	18	101	484	13	145	304	105	43	185	122	227
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	263	23	196	574	18	203	458	949	107	236	686	279
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	6	49	144	5	51	115	237	27	59	172	70
Total Analysis Volume [veh/h]	263	23	196	574	18	203	458	949	107	236	686	279
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.09	0.12	0.18	0.19	0.13	0.14	0.30	0.07	0.07	0.21	0.17
Intersection LOS	C											
Intersection V/C	0.783											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	960.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.519

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	46	0	531	0	811	241	33	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	501	0	486	164	0	184	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	0	1032	0	1297	405	33	366	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	258	0	324	101	8	92	0
Total Analysis Volume [veh/h]	0	0	0	46	0	1032	0	1297	405	33	366	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.01	0.00	1.52	0.00	0.01	0.00	0.09	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	473.58	0.00	960.61	0.00	0.00	0.00	15.57	0.00	0.00
Movement LOS				F		F		A	A	C	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	8.43	0.00	184.79	0.00	0.00	0.00	0.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	210.81	0.00	4619.66	0.00	0.00	0.00	7.25	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			939.83			0.00			1.29	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]						318.86						
Intersection LOS						F						

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	263.956

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	74	0	11	0	0	0	732	159	0	0	154	90
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	173	0	0	0	0	0	475	11	0	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	247	0	11	0	0	0	1207	170	0	0	165	90
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	0	3	0	0	0	302	43	0	0	41	23
Total Analysis Volume [veh/h]	247	0	11	0	0	0	1207	170	0	0	165	90
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	263.96	0.00	0.01	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	10.25	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				B	A			A	A
95th-Percentile Queue Length [veh/ln]	131.46	0.00	131.46	0.00	0.00	0.00	2.62	1.96	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3286.38	0.00	3286.38	0.00	0.00	0.00	65.55	48.89	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			8.99			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1371.63					
Intersection LOS							F					

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 Report File: J:\...\Cum+Projs AMv2.pdf

Orcutt 3 sites TIS-Site 2

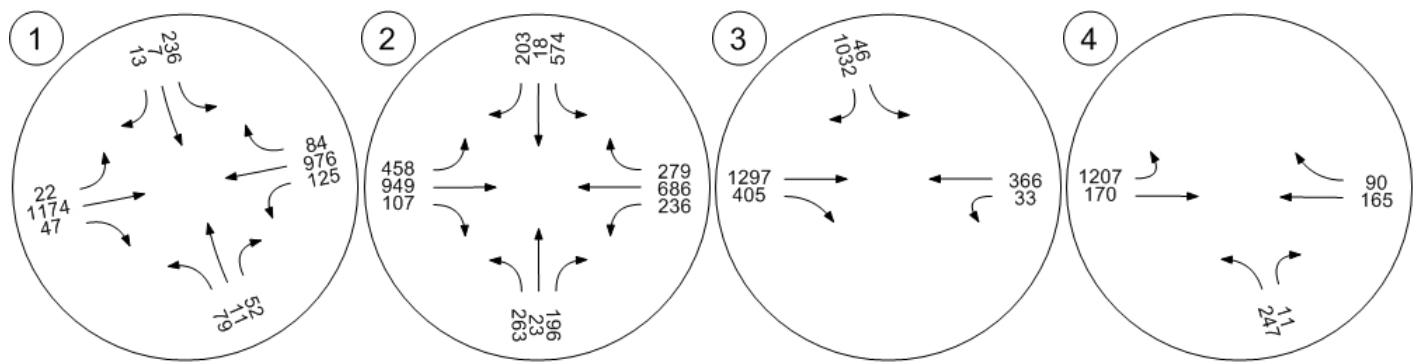
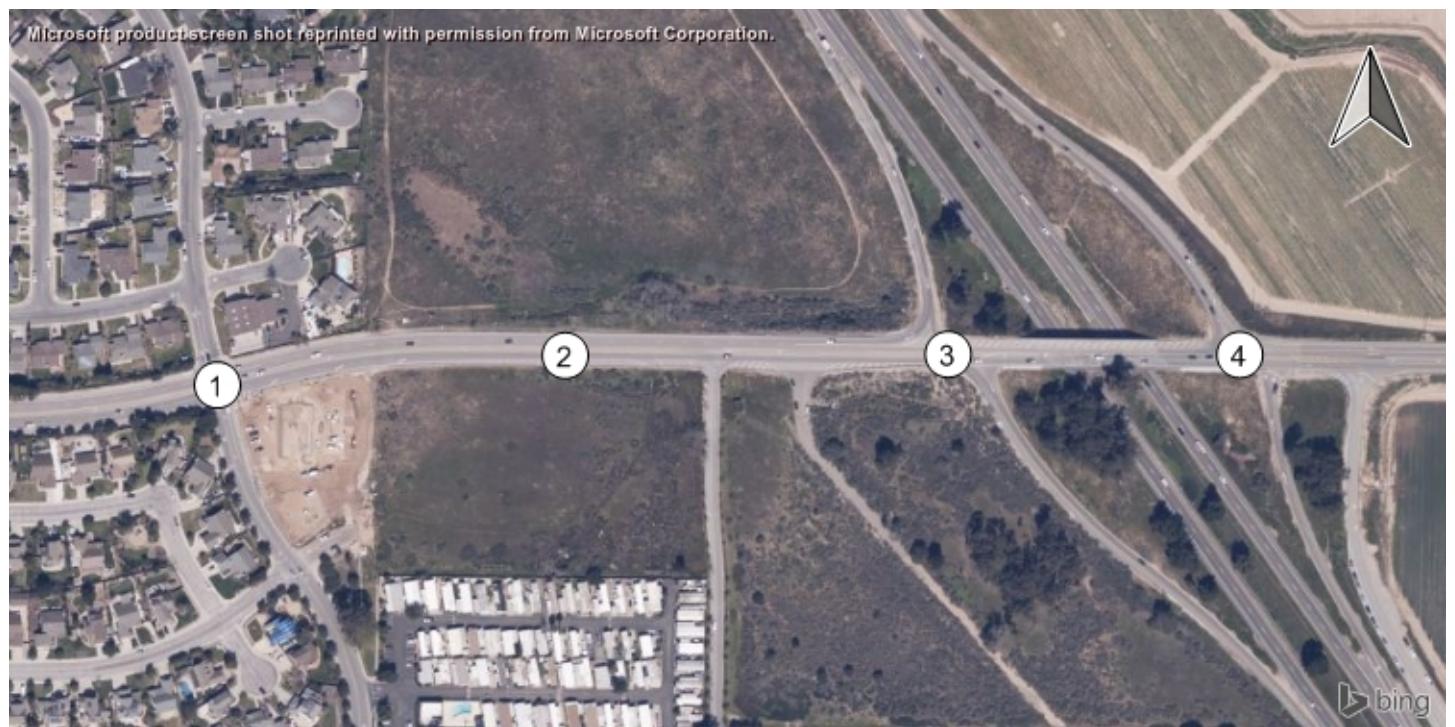
Scenario 14 Cumulative with Project AM
 11/18/2019

Trip Generation summary

Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
8: Project Site 2				1.000	0.000	50.00	50.00	325	297	622	27.76
9: Project Site 1				1.000	0.000	50.00	50.00	825	794	1619	72.24
Added Trips Total						1150	1091	2241	100.00		

Traffic Volume - Future Total Volume



Orcutt 3 sites TIS-Site 2

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Report File: J:\...\Cum+Projs PMv2.pdf

Scenario 15 Cumulative with Project PM

11/18/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Clark Ave/ Stillwell Rd	Signalized	ICU 1	WB Thru	0.895	-	D
2	Clark Ave/ Sunny Hills Rd	Signalized	ICU 1	WB Right	0.973	-	E
3	Clark Avenue/ US101 SB Ramps	Two-way stop	HCM 6th Edition	SB Left	3.268	4,289.8	F
4	Clark Avenue/ US101 NB Ramps	Two-way stop	HCM 6th Edition	NB Right	0.017	10,000.0	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Clark Ave/ Stillwell Rd**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 1 hour

Delay (sec / veh): -
 Level Of Service: D
 Volume to Capacity (v/c): 0.895

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	157.00	100.00	100.00	100.00	100.00	100.00	295.00	100.00	100.00	260.00	100.00	100.00
Speed [mph]	30.00			30.00			45.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	105	20	178	215	26	155	135	496	116	214	555	225
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	23	66	0	0	0	415	0	24	392	63
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	20	201	281	26	155	135	911	116	238	947	288
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	5	50	70	7	39	34	228	29	60	237	72
Total Analysis Volume [veh/h]	105	20	201	281	26	155	135	911	116	238	947	288
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	6	6	0	2	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	Lag	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.14	0.14	0.18	0.11	0.11	0.08	0.32	0.32	0.15	0.39	0.39
Intersection LOS	D											
Intersection V/C	0.895											

Intersection Level Of Service Report
Intersection 2: Clark Ave/ Sunny Hills Rd

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.973

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	2	0	1	2	0	1
Pocket Length [ft]	100.00	100.00	100.00	120.00	100.00	120.00	240.00	100.00	115.00	155.00	100.00	100.00
Speed [mph]	15.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	193	10	154	223	10	165	251	438	178	227	618	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	157	20	128	530	14	160	344	129	51	221	135	256
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	350	30	282	753	24	325	595	567	229	448	753	423
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	8	71	188	6	81	149	142	57	112	188	106
Total Analysis Volume [veh/h]	350	30	282	753	24	325	595	567	229	448	753	423
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.12	0.18	0.24	0.24	0.20	0.19	0.18	0.14	0.14	0.24	0.26
Intersection LOS	E											
Intersection V/C	0.973											

Intersection Level Of Service Report
Intersection 3: Clark Avenue/ US101 SB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	4,289.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	3.268

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	130.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	140	0	730	0	776	65	10	324	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	574	0	553	187	0	211	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	140	0	1304	0	1329	252	10	535	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	35	0	326	0	332	63	3	134	0
Total Analysis Volume [veh/h]	0	0	0	140	0	1304	0	1329	252	10	535	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	3.27	0.00	2.39	0.00	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	4289.80	0.00	2527.04	0.00	0.00	0.00	13.87	0.00	0.00
Movement LOS				F		F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	52.58	0.00	384.42	0.00	0.00	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1314.42	0.00	9610.51	0.00	0.00	0.00	1.85	0.00	0.00
d_A, Approach Delay [s/veh]		0.00			2697.94			0.00			0.25	
Approach LOS		A		F			A			A		
d_I, Intersection Delay [s/veh]							1091.31					
Intersection LOS							F					

Intersection Level Of Service Report
Intersection 4: Clark Avenue/ US101 NB Ramps

Control Type:	Two-way stop	Delay (sec / veh):	10,000.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.017

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	810.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	174	0	15	0	0	0	761	155	0	0	130	170
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	198	0	0	0	0	0	540	13	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	372	0	15	0	0	0	1301	168	0	0	143	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	93	0	4	0	0	0	325	42	0	0	36	43
Total Analysis Volume [veh/h]	372	0	15	0	0	0	1301	168	0	0	143	170
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.00	0.00	1.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10000.0	0.00	10000.0	0.00	0.00	0.00	11.25	0.00	0.00	0.00	0.00	0.00
Movement LOS	F		F				F	A			A	A
95th-Percentile Queue Length [veh/ln]	196.45	0.00	196.45	0.00	0.00	0.00	3.35	2.48	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4911.37	0.00	4911.37	0.00	0.00	0.00	83.82	61.96	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]		10000.00			0.00			9.96			0.00	
Approach LOS		F		A			A			A		
d_I, Intersection Delay [s/veh]							1790.98					
Intersection LOS							F					

Vistro File: J:\...\Site_2_v2.vistro
 Report File: J:\...\Cum+Projs PMv2.pdf

Orcutt 3 sites TIS-Site 2

Scenario 15 Cumulative with Project PM
 11/18/2019

Trip Generation summary

Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
8: Project Site 2				1.000	0.000	50.00	50.00	387	375	762	29.72
9: Project Site 1				1.000	0.000	50.00	50.00	932	870	1802	70.28
Added Trips Total								1319	1245	2564	100.00

Traffic Volume - Future Total Volume

